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PLATTE RIVER RESOURCE AREA

Resource Management Plan Final Environmental Impact Statement

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Dear Reader:

Enclosed for you review and future reference is the Final Resource Management Plan/Environmental Impact Statement (RMP/EIS) for managing public lands and resources in the Platte River Resource Area. This document presents the proposed management plan, which is a refinement of the preferred management plan presented in the draft RMP/EIS published in March 1984. The environmental consequences for the proposed management plan are also discussed in this document.

The draft RMP/EIS is an integral part of the Platte RMP process. That document and the maps in Volume II will be required as a reference to accompany this final RMP/EIS.

Without exception, all parts of the proposed management plan may be protested. Protests should be sent to the Director (202), Bureau of Land Management, 1800 C Street NW, Washington, D.C. 20240, before, December 14, 1984 (the end of the 30-day protest period). They should include the following information:

The name, mailing address, telephone number, and interest of the person filing the protest.

A statement of the issue or issues being protested.

A statement of the part or parts of the plan being protested.

A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party, or an indication of the date the issue or issues were discussed for the record.

A concise statement explaining why the proposed management plan is believed to be wrong.

At the end of the thirty-day protest period, the proposed management plan, excluding any portion under protest, will become final. Approval will be withheld on any portion of the plan under protest until final action has been completed.

Any significant change to the proposed management plan made as a result of a protest will be made available for public review and comment before final approval and implementation.

I want to personally thank those who have contributed to and participated in the development of this plan. The Platte RMP/EIS is the first land use plan in Wyoming to be prepared under the BLM's new resource management planning procedures. It has been a learning process for all of us. I hope your involvement will continue as we move forward into the implementation and monitoring phases of the Platte River Resource Area plan and as we develop RMPs for other public lands in Wyoming.

Sincerely yours,

Killory C. Oden
State Director

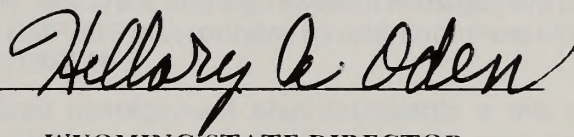
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FINAL

**RESOURCE MANAGEMENT PLAN/
ENVIRONMENTAL IMPACT STATEMENT
for the
PLATTE RIVER RESOURCE AREA
CASPER, WYOMING**

Prepared By:
U.S. Department of the Interior
Bureau of Land Management
November, 1984



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FINAL

RESOURCE MANAGEMENT PLAN
ENVIRONMENTAL IMPACT STATEMENT
for the
FLATIRON RESOURCE AREA
CASPER, WYOMING

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Denver, CO 80225-0250

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Division of Land Management
Bureau of Land Management
U.S. Department of the Interior
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P. O. Box 250
Denver, CO 80225-0250

**FINAL
RESOURCE MANAGEMENT PLAN/
ENVIRONMENTAL IMPACT STATEMENT
FOR THE PLATTE RIVER RESOURCE AREA
Natrona, Converse, Platte, and Goshen Counties, Wyoming**

Lead Agency: Bureau of Land Management, U.S. Department of the Interior

Type of Action: Administrative

Abstract:

This final resource management plan/environmental impact statement (RMP/EIS) presents a proposed plan for managing approximately 1.4 million surface acres and about 4.7 million acres of federal mineral estate administered by the Platte River Resource Area, Bureau of Land Management. The plan focuses primarily on 13 resource management issues relating to protection of cultural resources, extraction of sand and gravel, fire management, forest management, grazing management, land disposition, designation of utility/transportation corridors, withdrawal of certain areas from mineral development, obtaining access to public lands, management of recreational areas, watershed protection, management of wildlife habitat, and special designations for certain areas.

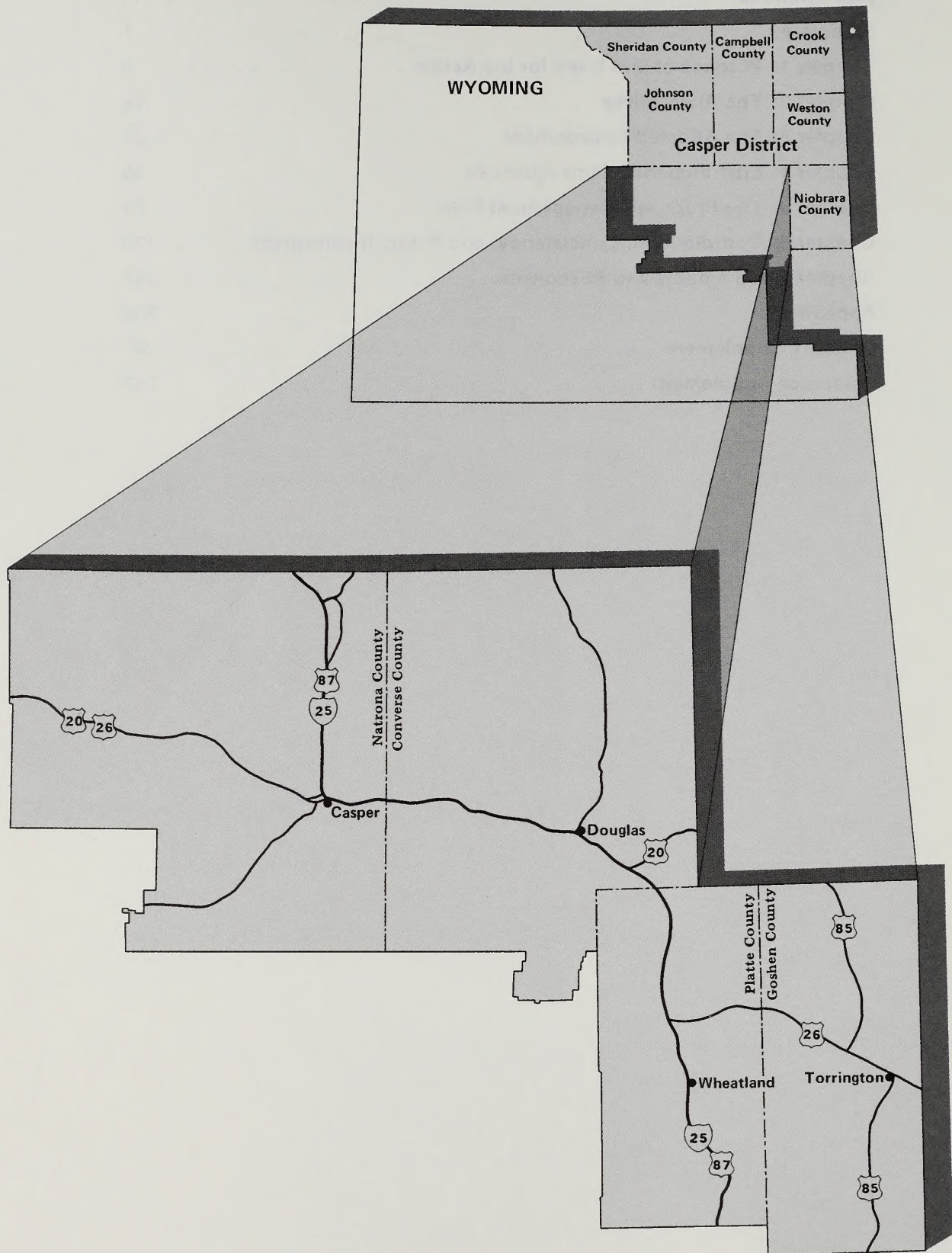
Four alternatives that address each issue were considered in the draft RMP/EIS. These were: continuation of present management (Alternative 1) and alternatives for low, moderate, and high levels of management (Alternatives 2, 3, and 4). This final RMP/EIS incorporates by reference most of the material presented in the draft RMP/EIS.

The agency's proposed management plan represents a mix of the four alternatives, emphasizing a balance between resource uses and resource protection. When approved, this document will provide a comprehensive framework for managing and allocating resources on the public land in the Platte River Resource Area during the next ten years, or longer. Further information regarding this document can be obtained from the address below.

Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
111 South Wolcott, Room 111
Casper, Wyoming 82601
Telephone (307) 261-5101

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Map1
Platte River Resource Area

ABBREVIATIONS

[Note: Many of these terms are further defined in the Glossary.]

ACEC	Area of critical environmental concern
AMP	Allotment management plan
APHIS	Animal and Plant Health Inspection Service, U.S. Department of Agriculture
AUM	Animal unit month
BLM	Bureau of Land Management, U.S. Department of the Interior
Btu	British thermal unit
"C" allotments	See appendix E
CFR	Code of Federal Regulations. Numbers refer to title and part; that is, 40 CFR 1500 refers to title 40, part 1500
cfs	Cubic feet per second
C&MU Act	Classification and Multiple Use Act of 1964
CRMP	Cultural resources management plan
db(A)	"A" weighted decibels
dbh	Diameter at breast height
DEPAD	Department of Economic Planning and Development, Wyoming
DEQ	Department of Environmental Quality, Wyoming
EA	Environmental assessment
EEA	Environmental education area
EIS	Environmental impact statement
EPA	U. S. Environmental Protection Agency
FAA	Federal Aviation Administration, U. S. Department of Transportation
FLPMA	Federal Land Policy and Management Act of 1976
FS	Forest Service, U.S. Department of Agriculture
GS	Geological Survey, U. S. Department of the Interior
HMP	Habitat management plan

Abbreviations

"I" allotments	See appendix E
KGS	Known geologic structure
"M" allotments	See appendix E
mbf	Thousand board feet
MCF	Thousand cubic feet
MFP	Management framework plan
mg/l	Milligrams per liter
NEPA	National Environmental Policy Act of 1969
NFYP	Normal fire year plan
ORV	Off-road vehicle
PRLA	Preference right lease application
PRRA	Platte River Resource Area
R&PP	Recreation and public purposes
RAMP	Recreation area management plan
RMP	Resource management plan
RMU	Resource management unit
SCS	Soil Conservation Service, U. S. Department of Agriculture
TDS	Total dissolved solids
TSP	Total suspended particulates
TSS	Total suspended solids
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFWS	U. S. Fish and Wildlife Service, Department of the Interior
VRM	Visual resource management
WGFD	Wyoming Game and Fish Department

INTRODUCTION

The final resource management plan/environmental impact statement (RMP/EIS) presents a plan for the management of approximately 1.4 million surface acres and 4.7 million acres of federal mineral estate administered by the Platte River Resource Area (PRRA), Bureau of Land Management (BLM).

The PRRA encompasses most of Natrona County, Wyoming, and all of Converse, Goshen, and Platte counties. Public land in the southwestern corner of Natrona County is administered by the BLM's Lander Resource Area, Rawlins District. The location of the PRRA is shown on map 1.

The plan focuses primarily on 13 resource management issues that were generated through a process involving intensive public input and professional judgment of BLM personnel.

HOW TO USE THIS DOCUMENT

The focus of this final RMP/EIS is on the proposed management plan. We have emphasized what we propose to do and what we think the consequences will be. We have repeated only the information from the draft RMP/EIS that is helpful in presenting the proposed management plan. The arrangement of the reprinted portions of this final document parallels the format of the draft RMP/EIS.

The overlay maps and ownership maps in Volume II of the draft EIS are an integral part of this plan. They have not been reprinted for this document. The overlays in Volume II of the draft will be periodically updated as information changes. Publics on the mailing list will receive a copy of maps that are updated.

Chapter 1 outlines the purpose of and need for this RMP/EIS. It was not substantially changed from the draft version.

Chapter 2 summarizes the alternatives presented in the draft RMP/EIS. Table 2-1 identifies each of the alternatives and the proposed management plan. It allows the reader to make a comparison between the alternatives and the selections for the proposed plan. Chapter 2 includes a rationale explaining why each selection was made for the proposed plan.

Chapter 3 in the draft described the existing environment. It has not been repeated here. A revised version of chapter 3, which incorporates new data or data changes, is available for review at the PRRA office in Casper, or copies of that chapter will be mailed upon request. None of the changes in chapter 3 resulted in a change in the decisions.

Chapter 4 discusses the consequences of implementing the proposed plan. Table 4-1 summarizes the consequences of the alternatives and the proposed management plan. Discussions of the "long term" refers to a period of ten years or more; "short term" refers to fewer than ten years.

The management prescriptions for each resource management unit (RMU) are defined in chapter 5. A map accompanies each RMU, and major management actions are defined on those maps. Note that the prescriptions for the RMUs are guided by the land use decisions contained in appendix B.

Chapter 6 has been updated to reflect public meetings that occurred during the 90-day comment period for the draft.

Chapter 7, a new chapter, presents all public comments received during the draft comment period and the BLM's responses to those comments.

Appendixes A, C, D, E, F, I, and J are incorporated into this final document by reference. Appendixes B, G, and H have been reprinted here with necessary revisions and additions.

The Glossary and References from the draft document are incorporated by reference. Supplements to these sections are included in this final RMP/EIS.

Purpose & Need



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INTRODUCTION

Scope and Background

This Platte River Resource Area Resource Management Plan/Environmental Impact Statement is a multiple use plan covering the full range of programs and resources under BLM administration. It will provide a comprehensive framework to guide future management on the public lands and resources in the resource area.

The process for the development, approval, maintenance, and amendment of RMPs and their associated EISs was initiated under the authority of section 202 (f) of the Federal Land Policy and Management Act of 1976 (FLPMA) and section 202 (c) of the National Environmental Policy Act of 1969 (NEPA). The process is guided by Bureau of Land Management planning regulations in Title 43 of the Code of Federal Regulations, part 1600 (43 CFR 1600) and Council on Environmental Quality Regulations (40 CFR 1500).

Planning Philosophy

Implementation of the BLM planning system is based on national and state guidance, including the interpretations provided by regulations, manuals, and various instruction memorandums issued by the Department of the Interior and the BLM. Court orders and legislative mandates also provide guidance and generally establish the schedules involved in the planning processes.

Preparation of this RMP represents the land use planning phase of the planning system. It is through this process that the management guidance for activity planning and daily operations is provided.

The activity planning phase of the systems will be initiated after the proposed plan is adopted. During activity planning, guidance provided by this plan will be applied to specific local resource needs through allotment management plans, habitat management plans, use authorizations, and similar plans.

Planning Strategy

We have addressed many resource management questions, conflicts, and needs in this land use plan, constrained only by the depth of needed

data we could acquire and by limitations on personnel and funding.

The BLM Planning regulations equate land use planning with problem solving, or issue resolution. An issue may be defined as an opportunity, conflict, or problem regarding the use or management of public lands and resources. Obviously, not all issues are capable of resolution through land use planning; some may instead require changes in policy, budgets, or legislation.

"Issue-driven" planning means that only the aspects of current management that are at issue are examined through the formulation and evaluation of alternatives. Alternatives are not developed for aspects of current management that are thought to be satisfactory.

The life of this plan will be at least ten years. At the end of that time, it will be reevaluated and continued, amended if necessary, or a new plan will be developed. Issues that could be raised within the next ten years will be resolved so long as resolution is in conformance with this plan. If it is not in conformance, resolutions will require an amendment.

When the consequences of implementing the alternatives are addressed in this document, the "short term" refers to less than ten years; the "long term" is ten years or more.

PURPOSE AND NEED

The major purpose in preparing this RMP was to provide a comprehensive framework for managing and allocating resources in the PRRA for the next ten years or more. Resource management at this time is guided by three separate MFPs that are in need of revision because decisions they contain either are covered by standard procedure or have been outdated by changes in laws and policies.

An RMP also is needed to consolidate all decisions into one plan, to analyze and attempt to resolve 13 resource issues, and to provide directions for site-specific activity planning in all BLM resource programs in the PRRA.

This RMP/EIS will serve a major need to comply with present BLM rangeland policy and to respond to a court mandate for preparation of a grazing EIS by September 30, 1984. Its further purpose is to evaluate the consequences of all BLM manage-

ment actions in one document and to reduce the number and complexity of environmental assessments (EAs) that otherwise would have to be prepared when the plan is implemented.

DESCRIPTION OF THE PLANNING AREA

The Platte River Resource Area in east central Wyoming (see map 1) is one of three resource areas in the BLM's Casper District. It covers four counties: Natrona, Converse, Platte, and Goshen, except for the extreme southwestern portion of Natrona County. A total of about 1.4 million acres of land surface and 2.9 million acres of mineral estate in the PRRA are under BLM management.

Most of the BLM-administered surface lands are in Natrona County. Converse County is next, followed by Platte and Goshen counties. The Forest Service, U.S. Department of Agriculture, administers the Medicine Bow National Forest, parts of which are in Converse and Platte counties, and the Thunder Basin National Grassland in Converse County. The Bureau of Reclamation, U.S. Department of the Interior, administers several thousand acres throughout the resource area. Administration of mineral resources beneath Forest Service and Bureau of Reclamation lands is a joint responsibility of BLM and those agencies. Lands owned by the state of Wyoming comprise approximately 9% of the lands in the four counties. Surface ownership and mineral ownership are illustrated on maps 2 and 3.

The Platte River Resource Area is bounded on the east by Nebraska, on the south and west by BLM's Rawlins District, and on the north by the Worland District and the Casper District's Buffalo and Newcastle resource areas. Under cooperative management agreements with the Worland and Rawlins districts, the PRRA administers approximately 20,140 acres of public land for grazing in those districts. Those lands are on 21 grazing allotments that cross district boundaries. Likewise, the Rawlins District administers 15 allotments and the Worland District administers 3 allotments within the PRRA boundaries.

Except for Natrona County, most of the BLM-administered land in the PRRA is in scattered tracts intermingled with state and private lands. The scattered land pattern in the PRRA strongly affects management options. Most of the parcels in Platte and Goshen counties are small and

isolated without public access. Most of the surface of public lands is used for livestock grazing, wildlife habitat, and recreation. Much of the subsurface acreage is rich in minerals, primarily oil and gas, coal, and uranium. Converse County, which is in the southern portion of the Powder River Basin, contains coal, oil, gas, uranium, and other valuable minerals.

The major population centers of the PRRA are the county seats: Casper, Douglas, Wheatland, and Torrington. The major center, and the one nearest the largest acreages of public land, is Casper. The primary industries within the PRRA are ranching and energy and minerals development.

THE PLANNING PROCESS

Action Steps in the Planning Process

The RMP process consists of nine action steps, which are described below and illustrated on figure 1-1.

Step 1: Identification of Issues

Step 1 is intended to identify resource management problems, conflicts, or opportunities in the PRRA that would be resolved through the planning process. The public, other federal agencies, and state and local governments were asked to identify public land management issues. During this step in the PRRA, a newsletter was published in April 1983, and four public meetings were held in May 1983. All issues were assessed, and those considered further were consolidated into 13 land use issues according to the BLM program under which each would be addressed. Appendix A in the draft RMP/EIS lists issues identified during step 1 and describes how they were formulated and addressed. The issues are described at the end of this chapter.

Step 2: Development of Planning Criteria

Step 2 involves development of criteria to identify the standards, guidelines and constraints that would apply to each issue throughout the planning process. In the PRRA, the original 46 issues and their related criteria were published in the April newsletter and distributed to approximately 1,200 individuals on the RMP mailing list. The public also was encouraged to comment at the public meetings. No public comments on the criteria were received. Criteria were revised as the issues were consolidated.

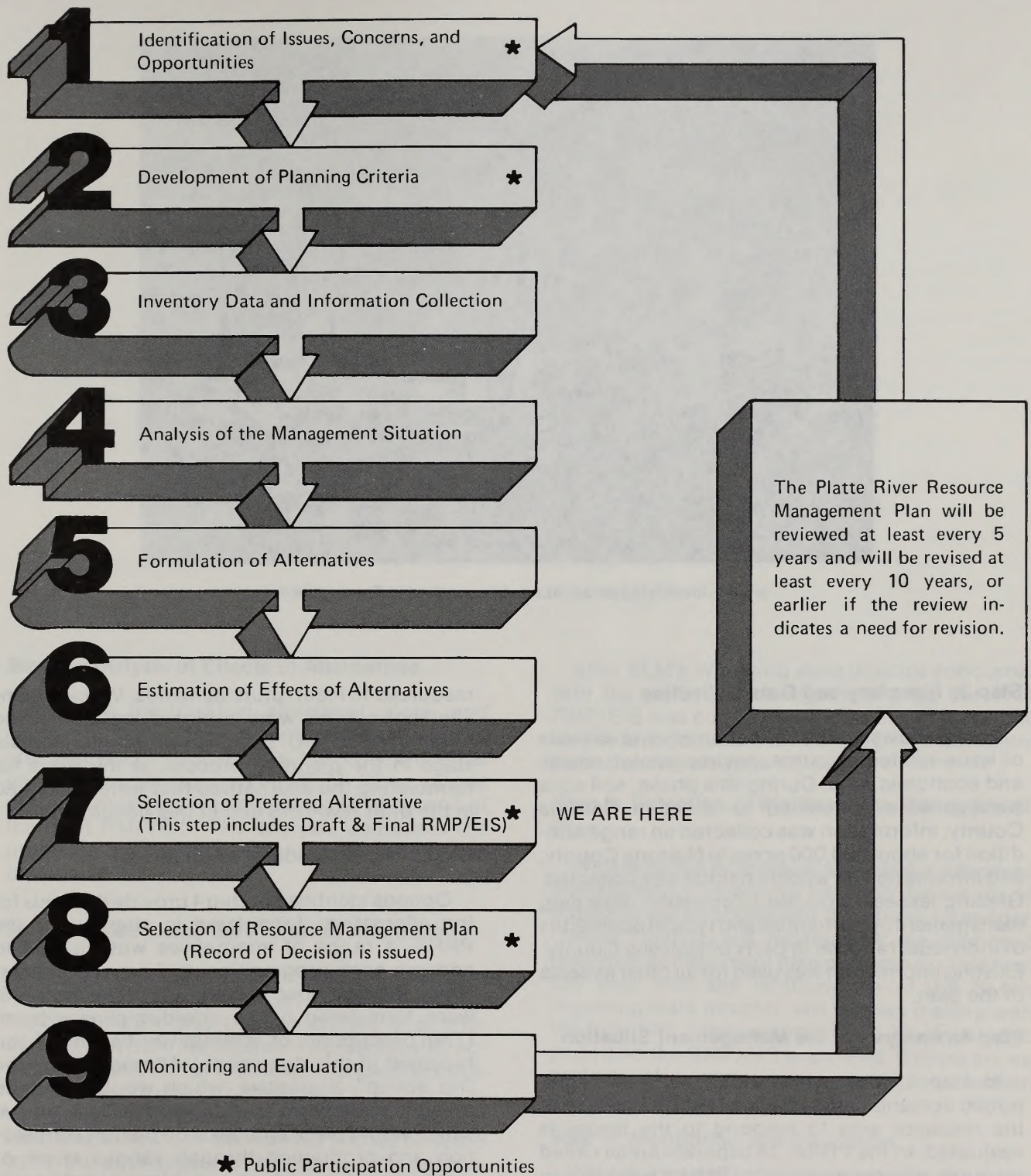


Figure I-1
STEPS IN THE RESOURCE MANAGEMENT
PLANNING PROCESS

Purpose and Need



Identifying issues at a public meeting in Torrington

Step 3: Inventory and Data Collection

Step 3 allows for the collection of various kinds of issue-related resource, environmental, social, and economic data. During this phase, soil surveys were completed for most of Natrona County; information was collected on range condition for about 500,000 acres in Natrona County; and information on wildlife habitat was collected. Grazing lessees provided information regarding management opportunities and typical operations of individual ranches in parts of Natrona County. Existing information was used for all other aspects of the plan.

Step 4: Analysis of the Management Situation

In step 4, the current situation is analyzed, public demand is assessed, and the capability of the resource area to respond to the issues is evaluated. In the PRRA, 14 separate areas called resource management units (RMUs) were identified where specific management or dominant resource uses now occur or could occur in the future. Each RMU was analyzed in terms of the issues, the data available, and the ability of the

resources to meet future demands. Various management options were explored that addressed issues in each RMU. This analysis, an intermediate stage in the planning process, is the basis for formulating the alternatives that were presented in the draft RMP/EIS and in this document.

Step 5: Formulation of Alternatives

Options identified in step 4 provide the basis for the alternatives formulated in step 5. For the PRRA, a range of alternatives was studied to address each program issue. Four alternatives, which are described in chapter 2 of the draft EIS, were formulated by an interdisciplinary team. (The description of alternatives has not been repeated in this document.) Alternative 1 is the "no action" alternative, which would continue present management. Alternatives 2, 3, and 4, which would place emphasis on resource protection and production through various levels of management, provide reasonable and implementable solutions for the 13 land use issues. The criteria that were used to guide formulation of alternatives are presented in chapter 2 of the draft but not repeated here.



RMP team members evaluating various management options

Step 6: Analysis of Effects of Alternatives

In step 6, the physical, biological, social, and economic effects of implementing each alternative are assessed. This step is the environmental impact analysis required by NEPA. The analysis of the alternatives was presented in chapter 4 of the draft RMP/EIS. The analysis addresses the proposed management plan presented in this document.

Step 7: Selection of the Preferred Alternative

Selection of the preferred alternative (step 7) in the PRRA was based on issues identified through the planning process, public input and coordination, current BLM management policies and directions, and analysis of the impacts of each alternative. Rather than select alternative 1, 2, 3, or 4 as the preferred management plan, we selected elements from those alternatives that we believed to be the best approach for addressing each of the 13 issues. Those selections were presented as the preferred management plan in the draft RMP/EIS. In some cases we have revised or redefined the selections. The proposed management plan is briefly discussed in chapter 2 and detailed in chapter 5.

After BLM's Wyoming state director concurred with the preferred management plan, the draft RMP/EIS was completed and released for public review and comment for 90 days. The comment period ended on June 11, 1984.

Step 8: Selection of the Resource Management Plan

We are in the process of selecting a proposed management plan on the basis of the results of public review and comment. The district manager, Casper District, will recommend the proposed resource management plan presented in this final EIS and, with the concurrence of the BLM's Wyoming state director, will publish it along with the final EIS. After publication, a 30-day protest period on the RMP/EIS is allowed. If there are no protests after that time, a record of decision (ROD) will be issued.

Step 9: Monitoring and Evaluation

Step 9 involves monitoring the selected plan after it is implemented and evaluating the results. Data on long-term trends and resource condition will be collected and analyzed so that the effectiveness of the plan can be determined. Monitoring in the PRRA will be carried out from the time the RMP is implemented until changing conditions require a revision of the plan or any portion of it.

ISSUES

The 13 issues to be addressed by this plan are described below. A full explanation of how they were derived appears in appendix A.

Protection of Cultural Resources

Protection of identified cultural resource values needs to be increased for the scientific or socio-cultural benefit of present and future generations. Increased activity in various land uses leads to and increased need for more effective management to protect cultural resources. Significant cultural sites may be deteriorating in value, and there is potential for permanent loss.

Sand and Gravel Extraction

The demand for sand and gravel is closely linked with construction and development occurring at or near the high population areas in the PRRA. The population areas are primarily along the North Platte River. Extraction of sand and gravel from the federal mineral estate is prohibited within ¼ mile on either side of the river for its entire length. There is a need to reevaluate this restriction and consider using sand and gravel within this ¼ mile buffer.

Fire Management

Current planning gives little direction to fire management as it relates to the resource values involved, whether it be protection through suppression efforts or enhancement through prescribed burning. Resource management objectives pertaining to fire need to be established so that fire use and suppression standards will be compatible with resource values.

Timber Harvest and Pine Beetle Control

Increased public demand for wood products from public lands has generated the need for the development and implementation of a timber management program. The productivity of public forestlands needs to be increased to meet public demand. Stands of trees contributing to the

increasing mountain pine beetle infestation need to be harvested to promote regeneration of trees with a higher tolerance to the pine beetle.

Grazing Management

Management changes appear to be needed in some livestock grazing allotments so that conflicts between livestock grazing, wildlife, and watershed uses and values can be reduced. Components of this issue are potential livestock-wildlife conflicts in critical ranges for antelope, deer, elk, and sage grouse; livestock-watershed conflicts in severe erosion areas or areas producing high sediment loads in streams; livestock overuse of riparian and subirrigated areas; opportunities for changing range conditions from fair to good; opportunities for range improvement projects that would increase forage or promote better utilization; prairie dog control conflicts; and weed control.

Lands

Disposal, Acquisition, and Leasing

There is a need to improve the efficiency and quality of management of the public land and to enhance the public's use of that land. Small, isolated parcels of public land scattered throughout the resource area are difficult to manage, and lack of legal access limits or precludes public use of most of those parcels. Through exchange or disposal of the isolated parcels, the BLM would have opportunities to accommodate public works projects and to meet the need for recreation and for residential, commercial, agricultural, and industrial land. Such actions also could eliminate or reduce management burdens and costs and enhance resource values and land ownership patterns.

Withdrawals

Development of locatable minerals can cause significant impacts to resource values such as developed recreation areas; scenic, natural, scientific, wildlife, and watershed values; and cultural and historical resources. In some areas, those resources could be permanently altered or destroyed. The BLM has limited control over mining activity under 43 CFR 3809, and in some cases, this control is not sufficient to protect public investments and resources. The protection afforded to three areas by the C&MU Act would be terminated.

Purpose and Need

Corridors

There is a need to change current corridor locations, to expand or relocate some corridors, and to reevaluate restricted right-of-way areas. Two existing corridors appear to be unnecessary; two others are in conflict with other management programs and resource values.

Access

As recreation demand increases, so will the associated access problems. Public lands can accommodate much of the demand if legal access to these lands is obtained. Limited funds for recreation will prohibit both extensive access acquisition and continued road maintenance. Priorities need to be assigned to acquisition of access and to road maintenance; unnecessary easements currently identified need to be eliminated; and poorly located and unneeded roads should be closed.

Recreation Management

Public expectations and demand for recreational opportunities are greater, in terms of quality and quantity, than BLM recreation management can provide. Existing use points to a significant need for the development of new recreation sites and support facilities. There is also a need to expand existing areas and facilities. Reduced management capability has not allowed for the proper management of recreation resources and use by

visitors. The accelerating population growth and high participation rates in outdoor recreation are placing new demands on the wildlife, fishing, scenic, and recreational resources.

Watershed Protection

An opportunity has been identified to develop a comprehensive watershed management effort to maintain and enhance watershed quality in the PRRA. This includes the reduction of erosion and the maintenance or enhancement of water yield and quality for wildlife, recreation, livestock, municipal use, irrigation, and other public uses.

Wildlife Habitat Management

There is an increased demand for access to small game hunting areas and stream fishing areas. Existing areas are overcrowded, and potential areas lack access and management. The same problems exist for nonconsumptive uses such as wildlife observation and photography. More intensive management of existing and potential wildlife habitat areas is needed.

Areas with Special Designations

Special management attention is needed in specific areas in the PRRA to protect important cultural and scenic values, wildlife resources, and other natural systems and processes.



Multiple use through land use planning

Alternatives



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INTRODUCTION

This chapter presents a brief summary of the resource management alternatives addressed in the draft RMP/EIS. Alternative 1 would continue present management in the PRRA, which has been guided by MFPs and other approved land use and activity plans. Alternative 2, low level management, would emphasize the administration of mandatory operations and other nondiscretionary public demand work at a minimum level. Intensive management would be directed at priority areas only. Alternative 3, moderate level management, would emphasize resource development consistent with necessary resource protection. Alternative 4, high level management, would emphasize maximum level of production of resources and use.

FORMULATION OF ALTERNATIVES

Alternatives for the resolution of the planning issues were formulated through analysis by the interdisciplinary team. The alternatives were designed to resolve the issues that have been identified in chapter 1. Varying degrees of emphasis were placed on resource protection and resource production in the alternatives formulated. The criteria used in formulating the alternatives are detailed on pages 34 and 35 of the draft document, and the alternatives are described in detail on pages 35 through 54 of the draft.

Several alternatives were considered during the planning process but eliminated from further detailed study. The rationale for dropping each of those possible alternatives is included in the draft RMP/EIS. These alternatives, which are described in the draft RMP/EIS, were elimination of livestock grazing, major reductions in livestock grazing, reduction of restrictions in oil and gas areas, and various leasing ranges for coal development.

SELECTION OF THE PREFERRED/PROPOSED PLAN

Rather than select one of the alternatives as the preferred alternative, we developed the preferred management plan presented in chapter 5 of the draft RMP/EIS by selecting elements of Alternatives 1, 2, 3, and 4, depending on which alternatives would best meet the needs of each resource program. The proposed management plan, which is described in general in this chapter and detailed in chapter 5 of this final RMP/EIS, is a refinement of the preferred plan presented in the draft.

The next section of this chapter details the rationale for selection of each element of the plan.

Table 2-1 contains a summary comparison of the four alternatives and the proposed management plan, which emphasizes a balance between resource uses and resource protection. Livestock grazing for each alternative on all "I" and "M" allotments in the PRRA is shown on table 2-2 in the draft RMP/EIS.



Special management is needed for bald eagle wintering areas along the North Platte River and adjacent mountains and canyons

TABLE 2-1
SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
Cultural Resources					
1. Resource protection					
C1 Spanish Diggings-680 acres	Alt. 1	Alt. 1	Alt. 1	Alt. 1	Alt. 1 - 520 acres
C2 Oregon Trail-867 acres	Alt. 1	Alt. 1	Alt. 1	Alt. 1	Alt. 1 - 955 acres
C3 Bozeman Trail-1,030 acres	Alt. 1	Alt. 1	Alt. 1	Alt. 1	Alt. 1 - 1,030 acres
C4 Establish data base-PRRA	None	None	Alt. 1	Alt. 1	Alt. 1
C5 Historic site inventory on 2 trails	None	None	High probability areas only	Alt. 1	Alt. 2
C6 Protect cultural resources on 14 sites-2,577 acres. Includes C1, C2, and C3.	Protect 10 sites 2,402 acres	Protect 15 sites 4,005 acres		Protect 23 sites-4,725 acres	Protect 21 sites; includes C1, C2, C3, and Notches Dome (4,225 acres)
Minerals Management					
Oil and Gas					
M1 4,644,090 acres available subject to program constraints and mitigation	Alt. 1	Alt. 1	Alt. 1	Alt. 1	4,641,000 acres available for oil and gas development
M2 Coal available in North Converse County (30,597 acres containing 555 million tons). Also 11 PRLAs--21,000 acres with 807 million tons. ^d	Alt. 1	Alt. 1	Alt. 1	Alt. 1	Alt. 1
2. Salable minerals					
M3 Available on demand except along the North Platte River. Use is excluded on 12,800 acres.	12,800 acres available with District Manager approval	9,400 acres available with District Manager approval	Alt. 1	Alt. 1	Alt. 1
M4 Available throughout PRRA except in withdrawn areas	Alt. 1	Alt. 1	Alt. 1	Alt. 1	Alt. 1

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
<u>Fire Management</u>					
3. Fire Management	FM 1 Full suppression, 100% of resource area as directed by NFYP [*]	Develop priority suppression planning for 6% of PRRA, incorporate in NFYP with resource-related suppression constraints, and the description of duties for resource area advisors assigned to wildfires	Priority suppression, 6% of RA incorporated with NFYP [*] as in Alt. 2	Priority suppression 6% (Alt. 2)	Alt. 3
		Retain full suppression on 32% of resource area	Retain full suppression on 32% of resource area	Retain full suppression in 9% of resource area	
		Develop limited suppression plan for 62% of resource area		Limited suppression on 85% of resource area	
		Retain full suppression on 94% of resource area			
	Prescribed burning in AMPs [*] approximately 1,600 acres. Prescribed burning is also used in support of the forestry program.	Prescribed burn plan would be developed at a level consistent with Alternative 2 resource planning needs.	Prescribed burn plan developed to address prescribed burn to facilitate resource needs at levels consistent with resource management priorities. Prescribed burns may be initiated by natural ignition if prior management prescriptions are in place.	Prescribed burn plan as in Alternative 3, but resource area-wide in scope. Proposed prescribed burn permit system.	
FM 2 Restrict heavy equipment use in certain areas	Alt. 1		Increased protection on elk range and potential cultural sites as they are identified	Alt. 3	Alt. 3

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
Forest Management					
4. Timber harvest/ pine beetle manage- ment					
	FM 3 Fire suppression in bald eagle roost areas	Retained, included as priority full sup- pression zones (NFYP)		Alt. 2	Alt. 2
	F1 Prepare timber management plans for 11 areas on 9,150 acres. Manage 4,750 acres of productive forestland.	No plans. Concen- trate management on 3,000 acres.	No plans. Concentrate management on 8,000 acres.	Prepare timber management plans for 17 areas on 13,590 acres. Manage 8,000 acres of productive and 26,000 acres of nonproductive forestland.	Alt. 4
	Mountain pine beetle control	None	Beetle control on Muddy Mountain, Little Red Creek, and Jackson Canyon (roost area only).	Full control	Full control on Muddy Mountain, Little Red Creek, and Jackson Canyon
	F2 Annual harvest level of 525 mbf	120 mbf	600 mbf	750 mbf for 5 years; 500 mbf for 5 years; then maintain at 120 mbf.	Alt. 4 -- 600 mbf annual average over life of the plan
	F3 Annual harvest in Muddy Mountain Environmental Education Area, 25 mbf	25 mbf	Increase to 100 mbf	Increase to 200 mbf for 3 to 5 years, and then maintain at 25 mbf.	Alt. 4
	F4 Thin 75 acres in Muddy Mountain forest demonstration area.	None	No thinning in EEA, 3 to 5 acres cut on rest of Muddy Mountain.	Thin as needed	Alt. 4--increase to 100 mbf for 10 years. Thin as needed there- after

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
Grazing					
5. Grazing management Lease Administra- tion					
Total authorized use in AUMs	203,704	202,848	217,631	222,168	Alt. 1 - maintain in short term
AMPs					
Existing	Maintain 2	Maintain 2	Maintain 2	Maintain 2	Alt. 1
New	None	2	11	27	
Total AMPs	2	4	13	29	
Total acreage	35,000	135,400	562,000	1,080,400	
Range improvement projects					
New long-term projects ^d					Alt. 3
Development period in years	76	5	50	20	
Springs	43	15	43	30	
Reservoirs	132	5	132	135	
Wells	24	0	24	25	
Brush control (acres)	19,975	0	19,975	26,580	
Fence (miles)	95	24	95	97	
New short-term projects^d					Alt. 3
(first 10 years)					
Springs	10	15	15	16	
Reservoirs	16	5	24	73	
Wells	3	0	5	11	
Brush control (acres)	2,000	0	4,125	14,500	
Fence (miles)	12	24	18	39	
B/C ratio	2.69 to 1	2.88 to 1	2.80 to 1	2.40 to 1	2.80 to 1
Stock driveway	Allow trailing use and moderate supplemental grazing	Allow trailing use only	Allow trailing and maximum supplemental use	Allow trail- ing and mod- erate supple- mental use	Alt. 1

Alternatives

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
<u>Weed and pest control</u>					
Weeds	County control under BLM contract	Minimal	BLM and county control	County control under BLM contract	Alt. 1
Grasshoppers	Control by APHIS*	No control	Control by APHIS*	Control by APHIS*	Alt. 1
Prairie dogs	Control	No control	Control	Control	Alt. 1 - subject to revised mitigation in Wildlife WL-9
<u>Lands</u>					
6. Disposal, acquisition, leasing	L1 Disposition R&PP, 1,050 acres Exchanges: 33 areas Other: 29,000 acres	520 acres 2 areas 79,500 acres	1,050 acres 3 areas 102,700 acres and 23,000 of that for exchange only	1,740 acres 8 areas 102,700 acres and no exchange restriction	Alt. 4 - 1,700 acres Alt. 4 Alt. 3
7. Withdrawals	L2 17 withdrawals-38,800 acres	None	5 withdrawals, 10,500 acres	6 withdrawals 19,200 acres	Alt. 3
8. Corridors	L3 Corridors--8; 10 areas restricted	Move 1 corridor; eliminate 3; no areas restricted; 5 corridors would be designated	Move 1 corridor; eliminate 3; 2 restricted areas are modified and 5 corridors are designated	Alt. 3	Alt. 3
9. Access	L4 Access--46 roads	None	17 roads, 38 miles	17 roads, 38 miles, and increase cooperative agreements	Alt. 4
<u>Recreation</u>					
10. Recreation management	R1 Manage 2 recreation areas from existing management plans (12,733 acres). Cooperate with Buffalo Resource Area on Middle Fork Area (21,000 acres).	Alt. 1	Amend 2 existing RAMPs	Alt. 3	Alt. 3

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
	Develop 12 new recreation management plans (35,480 acres).	None	2 new plans (5,467 acres)	13 plans 36,347 acres	Alt. 3 plus 1 new RAMP-North Platte River
	R2 Off-road vehicle designations (Natrona): open, 0; closed, 950; limited, 1,145,590	Open - 0 Closed - 950 Limited-1,398,503	Open - 200 Closed - 2,286 Limited - 1,396,967	Alt. 3	Alt. 3-Open 200 acres Closed - 2,615 acres Limited - 1,396,514 acres
	R3 Develop 3 plans for environmental education areas (240 acres)	None	Alt. 2	Alt. 2	Alt. 2-maintain education use on 3 sites--no plans
	R4 Maintain visual resource classes	Alt. 1	Alt. 1	Alt. 1	Alt. 1
<u>Soil, Water, Air</u>					
11. Watershed Protection	SWA 1 Develop watershed management plans				Implement the Bates Hole watershed plan
	Categorize 17 sensitive drainages and fragile areas	None	Develop and implement 1 plan on 9 drainages	Manage 22 drainages and 4 fragile areas	Alt. 4 - watershed plans as necessary
	Level II survey on 9 streams	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	Long-term monitoring on 13 streams	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	SWA 2 Surface Water Protection	Alt. 1	Alt. 1	Alt. 1	Alt. 1 - qualify the 200-foot intermittent and ephemeral restriction
	SWA 3 Development restrictions in 10 areas to protect watershed and soil	Alt. 1	Alt. 1	Add restriction on Front Range Laramie Mountains	Alt. 4 and all in Alt. 1 - maintain 10 existing areas and add the Laramie Mountain front range
	SWA 4 Slope restrictions	Alt. 1	Alt. 1	Alt. 1	Alt. 1 - eliminate the 15% restriction
	SWA 5 Restriction on Cedar Ridge	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	SWA 6 Control construction during winter	Alt. 1	Alt. 1	Alt. 1	Alt. 1

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
<u>Wildlife</u> 12. Wildlife Habitat Management Areas	SWA 7 Fence reseeded areas	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	SWA 8 Reseeding	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	SWA 9 Develop guidelines to protect fragile areas	None	Alt. 1	Alt. 1	Alt. 1
	SWA 10 Restrict development at rims and gorges	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	WL 1 Manage 3 existing HMPs [*] ; pre- pare and implement 13 new HMPs	Transfer 3 HMPs [*] to Wyoming Game and Fish Dept; complete 1 HMP/ACEC	Maintain 3 HMPs [*] and develop 4 HMPs	Maintain 3 HMPs [*] and develop 9 HMPs	Alt. 4
	WL 2 Antelope habitat	Alt. 1	Alt. 1	Alt. 1	Alt. 1 - qualify fencing
	WL 3 Deer habitat	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	WL 4 Sage grouse leks	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	WL 5 Elk calving ground and critical winter range	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	WL 6 Bald eagle critical winter habitat	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	WL 7 Raptors	Alt. 1	Alt. 1	Alt. 1	Alt. 1 - qualify the raptor restriction in the South Big Horns
	WL 8 Critical winter habitat for turkeys	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	WL 9 Black-footed ferret habitat	Alt. 1	Alt. 1	Alt. 1	Alt. 1
	WL 10 Riparian habitat	Alt. 1	Alt. 1	Alt. 1	Alt. 1

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b	Alt. 2 Low Level Management ^c	Alt. 3 Moderate Level Management ^c	Alt. 4 High Level Management ^c	Proposed Management Plan
<u>Special Designations</u>					
13. Intensive Management Areas					
SD 1 Pterodactyl Track ACEC-- cultural		Drop ACEC designation	Drop ACEC designation; withdraw 400 acres	Keep ACEC designation, withdraw 400 acres	Alt. 3 - drop ACEC designation; withdraw appropriate area after evaluation
SD 2 Red Wall ACEC--recreation		Drop ACEC designation	Alt. 2	Alt. 2 and withdraw from mineral development	Alt. 2
SD 3 Salt Creek ACEC--watershed		Monitor progress of ACEC plan	Alt. 1 and establish as historic district. Give priority to East Teapot and Smoky Gap fields for cleanup upon completion of the Salt Creek field.	Alt. 3 and equal emphasis on all fields in the ACEC.	Alt. 3
SD 4 Jackson Canyon ACEC-- wildlife		Maintain ACEC. No forest management in ACEC. No beetle control.	Maintain ACEC. Cut and thin beetle-infested trees in roost areas.	Maintain ACEC Cut beetle- infested trees in roost areas and buffer zones.	Alt. 3 - include with HMP for Jackson Canyon
SD 5 Muddy Mountain EEA (recreation)		Alt. 1	Manage Muddy Mountain EEA for full beetle control	Alt. 1	Alt. 3

SUMMARY COMPARISON OF ALTERNATIVES TO EXISTING MANAGEMENT BY PROGRAM AND ISSUE
(continued)

Program and 13 Issues ^a	Alt. 1 Continuation of Existing Management ^b				Alt. 2 Low Level Management ^c		Alt. 3 Moderate Level Management ^c		Alt. 4 High Level Management ^c		Proposed Management Plan	
SD 6 Fragile area - Casper Sand Dunes (soil, air, water)					No special management		Amend ORV designation		Same as Alt. 3, but oil and gas leases that expire would not be renewed		Alt. 3 - amend ORV designation; acquire access only if there is public demand	
	SD 7 Potential national natural landmarks ^e										Evaluate development proposals case by case	

*ABBREVIATIONS: ACEC = area of critical environmental concern. APHIS = Animal and Plant Health Inspection Service, U.S. Department of Agriculture. AMP = allotment management plan. AUM = Animal Unit Month. EEA = environmental education area. HMP = habitat management plan. NFYP = normal fire year plan.

a. The numbers in this column under the resource programs indicate the issues that are addressed. Issues are described in chapter 1 and appendix A.

b. Letter-number designations refer to existing land use decisions described in appendix B.

c. Where an alternative number is indicated, management would be as described for that alternative. Resource program decisions that have been retained from Alternative 1 would be carried in each of the alternatives for that program. The decisions are a part of the alternative and are merely identified as "Alt. 1."

d. This pertains to federal coal land outside the boundary of the Thunder Basin National Grassland (TBNG). An amendment to the Forest Service's land use plan that addressed federal coal in the TBNG was completed by the Forest Service in 1982. A summary of that plan is presented in appendix H.

e. Potential national natural landmarks were added in response to a request from the National Park Service during the draft comment period.

RATIONALE FOR SELECTIONS

Introduction

We have based our selection of the proposed management plan on what we consider is the best approach for addressing each issue. The proposed plan is made up of elements from Alternatives 1, 2, 3, and 4. In some cases, our selection in this final RMP/EIS is different from that identified in the draft, and in some cases we have modified the plan in response to public comments. The planning decisions that will guide the resource programs are defined in the revised appendix B in this final RMP/EIS.

Cultural Resources

Alternative 4 was selected as best for addressing the issue of protection of cultural resources. The selected program proposes an active role in managing cultural resources as opposed to a reactive program. We would concentrate management in areas or on sites where known cultural or historic values are present. This program would promote an active role in locating and affording adequate protection for cultural resources. Management would be initiated on all significant cultural sites in the resource area.

The proposed plan reflects four sites containing Oregon Trail ruts that have been identified since the draft was written. Total acreage that would be managed on the Oregon Trail is 955 acres

About 160 acres in the Spanish Diggings has been dropped from the proposed plan. That acreage would be managed by the Newcastle Resource Area, Casper District.

Energy and Minerals

Alternative 1 was selected as best for addressing the issue of sand and gravel extraction. The current demand for gravel along the river is being satisfactorily met from gravel sources from privately owned minerals and from federally owned minerals beyond the ¼-mile restriction along the river. Gravel supplies from these sources are expected to remain adequate to meet future demands.

The ¼-mile restriction on mining sand and gravel would be retained. Public comment indicated a concern that existing authorized

operations within the ¼-mile buffer should be specifically recognized in the proposed plan. This has been done in decision M3, appendix B. The marketing of sand and gravel, moss rock, flagstone, and other mineral materials from the federal mineral estate is proceeding satisfactorily throughout the resource area.

Other public minerals would be managed as defined in appendixes B, G, and H in this final RMP/EIS.

Fire Management

Alternative 3 was selected as best for addressing the issue of fire management. This alternative provides the best mix of fire management within an obtainable planning strategy. It requires active involvement in the planning, field reconnaissance, and implementation phases by both the district fire management officer and a resource area advisor. In addition, input would be sought from all resource area personnel for the normal fire year plan (NFYP). This practice should result in a stronger suppression strategy and coordinated resource protection effort.

Establishment of fire suppression zones would highlight resource values and place protection emphasis on areas where wildfire has the greatest potential for adverse impact on property and human life. A written plan of operation for each zone would be required. A wildfire rehabilitation plan and a prescribed fire plan also would be developed. A limited suppression plan would identify areas of low resource value and address suppression in RMUs at costs commensurate to those values. The prescribed fire plan can become extremely important as a planning document preceding activity level planning, so that the fire management program can anticipate resource goals and timely completion of priority management objectives.

Forest Management

Alternative 4 was selected as best for addressing the issue of timber harvest and pine beetle control.

The proposed plan offers the best opportunity to carry out effective forest management. It considers other forest management actions such as inventory, field reconnaissance, and management plan prescriptions that are needed for an effective program, and it does not place singular emphasis on harvesting.

Alternatives

The plan also provides for an active forest management program that would reasonably harvest the productive forestland in a short time and prepare the way for future supplies of timber products. This cannot be done until stands are brought under management and then managed for their full productivity. The forest program would maximize forest management to gain full utilization of the product.

The forest program promotes an aggressive treatment of the pine beetle problem and full consideration for use of wood products from productive and nonproductive forestland.

In response to public comment, we will defer harvesting in the Squaw Mountain area. Forest management in that area would be limited to inventory.

Grazing Management

Alternative 1 was selected as best for all aspects of grazing management except range improvement projects. Under the preferred management plan, development of range improvement projects would be intensified; therefore, Alternative 3 was selected as the best alternative for range improvements. This selection does not change the number of project proposals in the long term. It does intensify the development of range projects in the short term.

Analysis of the grazing situation in the resource management plan shows the following situation to exist in the Platte River Resource Area:

Areawide range conditions are generally rated good. There has been a gradual historic improvement in range condition.

Of the 10% overall potential increase in livestock forage, half could be acquired through livestock management techniques and half through the development of range improvement projects.

Overgrazing problems, when they do occur, are generally sporadic and isolated and in different areas from year to year. The analysis did not show significant use conflicts between livestock and other resource users.

The proposed grazing management program allows for intensifying use supervision over the entire resource area, but most particularly in "I" and "M" category allotments. Range improvement project money would be used primarily for development of new projects rather than for project maintenance.

Livestock grazing use changes that are needed because of future use conflicts or project development would be implemented through lease stipulations rather than through intensive allotment management plans (AMPs).

The proposed plan would allow administration of all leases, adequate supervision of "I" and "M" allotments, reaction to grazing problems as they occur, and improvement of range conditions through project development and limited livestock manipulation. We can do this without creating adverse impacts on resources or range users within the resource area.

Lands

Disposal, Acquisition, and Leasing

Recreation and Public Purposes

Alternative 4 was selected to best address public purpose needs. That alternative would allow maximum use of public lands for public purposes by reserving 13 parcels in eight areas for this use only. Of these 13 parcels, four parcels totaling 470 acres could be considered for disposal by other means, including sales, after 1987. The work would still be reactive, as an application is required to initiate BLM action on public purpose requests.

Under this alternative, the ownership or management of ten riverfront parcels east of Casper could be transferred only under the R&PP Act. This would ensure continued public use of these lands, a total of 1,309.77 acres. The BLM is not actively managing these parcels and such management appears unlikely, so an opportunity to enhance public recreation use would be lost. Transfer of management or ownership of these parcels to another public agency would result in their development for public recreation and ensure enhancement, protection, and management of the resource values along the river.

Exchanges

Alternative 4 was selected as best for handling exchanges. It would provide a broad base of areas in which the BLM could acquire land in exchange for public land. The areas included in Alternative 4 provide a more reasonable exchange package than those in other alternatives. The exchanges are keyed to prime areas identified for

more intensive management by other programs, and are highly likely to result in better federal land management and improved public use and resource values.

Sales and Other Disposals

Alternative 3 was selected as best for land sales and other disposals. This alternative would put the BLM in an active sales program consistent with recent program efforts and funding. It also would present a good opportunity to improve management efforts and reduce costs by disposing of unneeded and unmanageable parcels.

Lands outside RMUs 1 through 13 could be disposed of without limitation as to whether the disposal was by sale, exchange, R&PP, or other methods. Disposals within RMUs 1 through 13 would be limited to exchanges or to disposal for public purpose needs (which would include sales in certain circumstances). This limitation would result in retention and management of most of the disposal parcels in RMUs 1 through 13.

Withdrawals

Alternative 3 was selected as best for the issue of withdrawals. It would limit consideration to areas that actually meet the criteria and are suitable for withdrawal. Areas identified in past planning that do not meet the criteria are eliminated from further consideration, and new areas not previously considered are included.

Corridors

Alternative 3 was selected as best to address the issue of corridors. It would eliminate unnecessary corridors and right-of-way restrictions, tow corridors in conflict with other important resource values, and one corridor that has been filled by rights-of-way. Several existing corridors and one new corridor would be designated. This alternative presents a realistic corridor decision with the necessary flexibility to accommodate future rights-of-way needs in the area.

Access

Alternative 4 was selected as providing the most realistic overall transportation plan. Under this alternative, unneeded access roads would be eliminated from further consideration for acquisition, and those that are needed are better defined. Access roads would be keyed to management areas of high demand or high use.

Recreation Management

Alternative 3 was selected as best to address the issues of recreation management. Management and maintenance priorities for the eight existing recreation sites, in order of high to low priority, would be Muddy Mountain, Goldeneye, Bessemer Bend Historic Site, Trappers Route Canoe Trail, Oregon-Mormon Trail, Buffalo Creek Campground, Grave Springs Campground, and Camel Hump Campground. The Bessemer Bend Historic Site, which is part of the Oregon National Historic Trail and the Mormon Pioneer National Historic Trail (called the Oregon-Mormon Trail in this document), would be included in the Oregon-Mormon Pioneer National Historic Trail Recreation Area Management Plan (RAMP) to be developed in 1984.

Facility development in two special recreation management areas identified in the Muddy Mountain and Goldeneye RAMPs would continue to be implemented. The Muddy Mountain RAMP would be amended to include a day use area and group camping area and forest management of a natural area. Priority management for winter use on Muddy Mountain would focus on the snowmobile program. The Goldeneye RAMP would be amended to provide an overnight camping area. High priority preparation and implementation of the North Platte River special recreation management area RAMP would be achieved. The PRRA would provide recreation input into the statewide Oregon-Mormon Pioneer Historic Trail RAMP.

Facility development on the remaining recreation areas would be limited to support facilities necessary for the health and safety of the users. We would continue to provide monitoring, use supervision, and enforcement on all public lands in the PRRA.

Alternative 3 would best address management for off-road vehicles (ORVs). That alternative provides for closing four additional tracts on the Oregon-Mormon Trail—a total of 955 acres—to ORV use. Also closed to ORV use would be 1,030 acres on the Bozeman Trail and 630 acres at the Muddy Mountain Environmental Education Area (EEA). A 200-acre area at the Poison Spider bentonite pit would be open to ORV use. ORV use in the Casper Sand Dunes would be modified to allow use of existing roads and trails during the fall hunting season. ORV use on the remaining public land in the PRRA would be limited to existing roads except for the performance of necessary tasks.

Alternatives

Alternative 2 was selected to address management for environmental education areas. The BLM would not develop environmental education area plans in cooperation with the Natrona County School System but would continue to authorize use through special recreation use permits.

Recreation management efforts in the PRRA would be supported through the BLM's ability to monitor and supervise use and to conduct enforcement. Priority would place special recreation areas first, ORV designations second, developed extensive areas third, and undeveloped extensive areas fourth.

There would be no change in visual resource management.

Soil, Water, and Air

Alternative 4 was selected as best to address the issue of watershed protection. This alternative would provide comprehensive watershed management effort in the PRRA to maintain and enhance watershed quality. The effort would include reduction of erosion and maintenance or enhancement of water yield and quality for wildlife, recreation, livestock, municipal use, irrigation, and other public uses. This would be accomplished through the development and implementation of management plans in Bates Hole and in identified sensitive drainages and designated fragile areas as necessary.

The proposed plan would support Wyoming State Office goals and objectives in "providing for the protection and enhancement of soil quality by preventing or reducing soil erosion (wind/water), thus minimizing sedimentation and deterioration of the resource base." It complies with relevant laws and solicitors' opinions concerning the BLM's responsibilities for protecting and enhancing the quality, quantity, and use of waters on public lands, and it supports local and national efforts to maintain and improve air quality. It provides for an active soils and watershed management program in that protective decisions would be applied where necessary. It also would provide for enhancement of watershed condition (reduction of erosion and the improvement of surface water quality) in identified areas of concern.

As a result of public comment, we have clarified the constraints on intermittent and ephemeral streams and have revised the slope restriction. The requirements for 15% slopes have been eliminated. Development plans and associated engineered drawing would be required on pro-

posals for development on slopes in excess of 25% throughout the PRRA except in the South Big Horns. In that area (RMU-1), no development would be permitted on slopes of more than 25%.

Wildlife

Alternative 4 was selected as best to address the issue of wildlife habitat management. Twelve areas would be intensively managed for wildlife: Table Mountain, Springer/Bump-Sullivan, Jackson Canyon, Medicine Bow, Rawhide, Bolton Creek, Stinking Creek, Upper Laramie River, Bates Creek Aquatic Habitat, Bates Creek Reservoir, Teal Marsh Reservoir, and Thirty-three Mile Reservoir.

The Medicine Bow area encompasses 50,000 acres in the PRRA. A management plan for this area is being cooperatively developed with the Medicine Bow Resource Area of the Rawlins District. Opportunities are available here to improve endangered species habitat (bald eagle, black-footed ferret, peregrine falcon), aspen stands, riparian habitats, and waterfowl and big game habitats.

There are 200 acres of public lands adjacent to the Wyoming Game and Fish Department's Rawhide Unit that could be managed cooperatively with the WGFD to provide for hunting, fishing, and canoeing. Bolton Creek (200 acres) and Stinking Creek (500 acres) are two other areas that could provide improved riparian habitat for big game, small game, and nongame wildlife. All of these areas have public access and good potential for improvement of habitat and wildlife recreation.

The BLM has cooperated with the WGFD in providing extensive habitat development and waterfowl hunting in the Table Mountain and Springer/Bump-Sullivan units. The Jackson Canyon ACEC/HMP would continue to be managed for bald eagle habitat, with increased forest management to control mountain pine beetle infestations. Wetlands would be improved in Teal Marsh and in Thirty-three Mile and Bates Creek reservoirs. Fisheries and riparian habitats would be improved at Bates Creek and Upper Laramie River.

As a result of public comment, we have eliminated the restriction on all raptor nests in the South Big Horns (RMU-1). The restriction will apply only to federal and state high interest species. This conforms to the decision contained in WL-7, appendix B in this document.

Special Designations

Alternative 3 was selected for all areas with special designations except the Red Wall, for which Alternative 2 was selected.

The ACEC designation for the Red Wall would be removed. Current management would continue, and the area would be withdrawn from mineral entry. The current management adequately protects resources in this area without the development of a recreation management plan.

The ACEC designation for the Pterodactyl Track would be removed, and about 400 acres would be recommended for withdrawal from mineral entry. Existing protective measures and a withdrawal from mineral entry would adequately protect the resources in the area. To date there has been little support from the general public or the scientific community for development of a management plan for the area.

The management plan for the Salt Creek drainage ACEC would be amended to establish portions of this area as a historic district if inventory and study revealed sufficient historic resources in place to warrant its establishment. Establishment of the area as a historic district would not interfere with current operation but would provide for the establishment of interpretive sites in significant areas and could provide some financial incentive for cleanup.

The Jackson Canyon ACEC designation would be maintained. An implementation plan for this area would be included as a portion of a resource area-wide bald eagle HMP, and under this plan the ACEC would continue to be managed primarily for bald eagle habitat and to maintain priority for this important endangered species habitat. Protection of winter roosts from mountain pine beetle infestations would be enhanced, and the BLM would cooperate with state, county, and private control efforts. Stipulations would restrict disturbance during winter from such activities as ORV use, minerals exploration and development, and rights-of-way.

A withdrawal from mineral entry would be pursued for the Muddy Mountain EEA to ensure the integrity of the area for continued use for environmental education. The 675-acre natural area would undergo intensive forest management to control mountain pine beetle infestations. To date the area has been managed strictly as a natural area. The change is needed to ensure that the stand remains healthy and to stimulate regeneration.

In response to comments received from the National Park Service, we will recognize four areas as potential national natural landmarks. The addition will not significantly affect management in these areas.



Bald eagle winter roost area in the Jackson Canyon ACEC

Affected Environment



CHAPTER 3

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NOTE

Chapter 3 has not been reprinted in this final RMP/EIS. Copies of that chapter incorporating all revisions are available at the Platte River Resource Area office in Casper.

Most of the comments received during the comment period pertained to chapter 3. All comments were evaluated according to the following criteria:

Does the comment add information to the data base, clarify the data base, or identify errors in data?

Does the comment provide information that will necessitate a new analysis, and possibly a subsequent change in a decision in the RMP/EIS?

All comments pertaining to chapter 3 were informational; none would have necessitated a change in a decision. For this reason, we felt it was appropriate to minimize the expenditure of public funds by not reprinting the chapter.

CHAPTER 4



INTRODUCTION

The environmental consequences (impacts) associated with the proposed management plan are discussed in this chapter. They are presented by BLM program and are defined in terms of what is likely to happen to various resources or land uses during the life of this plan. Impacts that are not discussed here either have no significance or would not occur.

Consequences associated with Alternatives 1 through 4 from the draft RMP/EIS are not repeated in this document. They are briefly summarized in table 4-1. Table 4-1 allows the reader to compare the consequences of the alternatives and the proposed management plan presented in this final RMP/EIS. Discussion of the "long term" refers to a period of ten years or more; "short term" refers to less than ten years.

CONSEQUENCES OF THE PROPOSED MANAGEMENT PLAN

Cultural Resource Management

Twenty-one sites containing significant cultural resources would be protected. These sites encompass 4,225 acres. This figure represents the addition of four new sites on the Oregon Trail (Bessemer Bend, Sergeant Custard, Glade Draw, and Platte Island) and the removal of one site from the Spanish Diggings. Surface disturbance would be excluded on 2,625 acres. This represents a 48-acre increase over the preferred management plan in the draft RMP/EIS.

Effects on Cultural Resources

The proposed plan would protect all known significant sites containing historic wagon ruts on the Oregon and Bozeman Trails, six historic stage and pony express stations, Rawhide Buttes, and four additional sites that include the Rock Cairn trail. Seven sites on the Oregon Trail would be nominated to the National Register of Historic Places. No surface development would be allowed on these sites. This should preserve the significant historic resource values associated with those sites.

No inventories would be initiated on the Texas Trail or the Mormon Trail. These trails are

confined to Platte and Goshen counties, where public land ownership is minimal. The cost of the inventory plus the very limited management that might be initiated would not be cost effective. The probability of surface development on public surface that might effect trail remnants is considered to be very low in this area.

Until recently, all surface development proposals were preceded by an on-site (Class III) inventory for cultural resources. The probability of destroying cultural resources was minimal. In addition, these inventories added to the data base in the PRRA. At present, new policy (Operating Order No. 1) emphasizes reliance on existing data and a "reason to believe" there may be cultural resources at a proposed development site. An on-site inventory would be conducted on sites where data suggests the presence of cultural resources (reason to believe).

The procedure relies heavily on an existing data base, which is not established for the PRRA. Thus, the probability of affecting cultural resources from reducing on-site cultural inventories will be increased in the short term. That impact is expected to decrease after the model for predicting the probable occurrence of cultural resources is operational.

It is projected that implementing this new policy relative to oil and gas will increase the probability of impacting a cultural site on those areas where data is lacking. How much increase cannot be determined. The probability of impacting cultural resources in or adjacent to existing oil and gas fields would remain at about 1% because the data base is excellent in these areas.

Effects on Mineral Resources

Of the 4,225 acres that would be protected to preserve significant cultural sites, no surface disturbance would be allowed on 2625 acres. Prohibition of surface disturbance reduces the accessibility of these lands to explore for and develop leasable minerals, especially oil and gas. Oil and gas potential is rated as high on about 1,900 acres and moderate on 725 acres. Nominating seven sites to the National Register would preclude mineral development on those sites both in the short term and the long term.

Areas where potential conflicts could occur are the Bozeman Trail and the Notches Dome Archeologic District. The Bozeman Trail (1,030 acres) is in an area subjected to intense oil and gas development. The largest of the Bozeman Trail sites covers 670 acres. The oil and gas resource is leased, but occupancy of the surface is prohibited.

TABLE 4-1
SUMMARY OF ENVIRONMENTAL CONSEQUENCES BY ALTERNATIVE

Program/Issue	Alternative 1 Continuation of Existing Management ^a	Alternative 2 Low Level Management ^a	Alternative 3 Moderate Level Management ^a	Alternative 4 High Level Management ^a	Proposed Management Plan (net difference) ^b
Cultural Resource Mgmt. Program					
Resource protection	Cultural resource values would be protected in 14 areas (2,577 acres).	Minor decrease in cultural resource protection to 10 areas (2,400 acres).	Significant increase in cultural resource protection to 15 areas (4,000 acres).	Significant increase in cultural resource protection to 23 areas (4,725 acres)	ALT. 4 would significantly increase cultural resource protection on 21 areas (4,225 acres). No surface disturbance would be allowed on 2,625 acres.
Energy and Minerals Mgmt. Program					
Oil and gas	Oil and gas resource values are available on 4,644,090 acres subject to mitigation. 1,300 acres are disturbed annually.	No change	No change	No change	ALT. 1--About 4,641,000 acres would be available for oil and gas development. This is a 2,500-acre decrease from present management.
Coal	Coal land available on 51,597 acres (1,362 million tons). Coal would be removed on 200 acres annually through 1985 and 400 acres annually thereafter.	No change	No change	No change	ALT 1--addresses coal outside the Thunder Basin National Grassland. See appendix H for a summary of coal planning in the TBNG.
Sand and gravel availability	Sand and gravel resource values are available throughout PRRA except for 12,800 acres where all resource values would be protected. Removal rate is about 40 acres per year.	Significant increase in availability of sand and gravel resources by allowing extraction of additional 12,800 acres.	Minor increase in availability of sand and gravel resources by allowing extraction of additional 9,400 acres.	No change from Alt. 2	ALT. 1--no change except existing operations would be continued.
	Locatable mineral resources available throughout PRRA except for 340,800 acres. Only 38,800 acres would be withdrawn to protect resource values. The remaining 302,000 acres are managed by other federal agencies.	Withdrawn land would decrease 38,800 acres, for a total withdrawn area of 302,000 acres.	Withdrawn land would decrease 28,300 acres, for a total withdrawn area of 312,500 acres.	Withdrawn land would decrease 19,600 acres for a total withdrawn area of 321,200 acres.	ALT. 3 would decrease withdrawal proposals by 28,300 acres. BLM would recommend withdrawal on 7,500 acres and retain one 3,000-acre withdrawal. Total land that would be withdrawn is 312,500 acres of which 10,500 is managed by the BLM.

Environmental Consequences

SUMMARY OF ENVIRONMENTAL CONSEQUENCES BY ALTERNATIVE
(continued)

Program/Issue	Alternative 1 Continuation of Existing Management ^a	Alternative 2 Low Level Management ^a	Alternative 3 Moderate Level Management ^a	Alternative 4 High Level Management ^a	Proposed Management Plan (net difference) ^b
Fire Management Program					
Fire management	None	Priority suppression on 6% of PRRA would provide maximum protection of high value resources.	No change from Alt. 2	No change from Alt. 2	ALT. 3 would increase maximum protection of high value resources on 6% of PRRA.
	Full suppression on 100% of PRRA would provide protection of all resource values.	Decrease full suppression to 94% of PRRA.	Decrease full suppression to 32% of PRRA.	Decrease full suppression to 9% of PRRA.	ALT. 3 would significantly decrease protection of all resource values on 68% of PRRA but maintain protection on 32%.
	None	None	Limited suppression on 62% of PRRA would protect low value resources.	Increase limited suppression to 85% of PRRA to protect low value resources.	ALT. 3 would significantly increase protection of low value resources on 62% of PRRA.
	Prescribed fire on 1,600 acres would enhance range, forestry, and wildlife values. All other values would be maintained.	Increase acreage as determined by other resource activity planning needs, range, forestry, and wildlife values would be enhanced. All other values would be maintained.	Increase acreage as determined by priority resource needs developed in a prescribed fire plan.	Increase acreage as determined by all resource activity needs in PRRA.	ALT. 3 would increase prescribed fire by 8,400 acres. This is an increase of 6,400 acres for the range program and 2,000 acres for the forest and wildlife programs.
Forest Management Program					
Timber harvest and pine beetle control	Intensive management of 11 planning areas (9,150 acres) would enhance timber harvest resource base.	No intensive management for 9,150 acres would be a significant loss in timber harvest resource base.	Priority management on 8,000 acres with emphasis on control of pine beetles.	Significant increase to 17 plans (13,590 acres) would significantly increase timber harvest resource base with short-term emphasis or beetle control.	ALT. 4 would moderately increase timber harvest resource base by 6 areas (4,440 acres) and enhance overall timber value.
	Management of 4,750 acres of forestland would maintain timber harvest base. 105 acres disturbed annually.	Minor decrease to 3,000 acres would reduce timber resource availability.	Increase to 8,000 acres would moderately increase timber resource availability.	Increase to 34,000 acres would significantly increase timber resource availability.	ALT. 4 would significantly increase timber resource availability by 29,250 acres.

Environmental Consequences

SUMMARY OF ENVIRONMENTAL CONSEQUENCES BY ALTERNATIVE
(continued)

Program/Issue	Alternative 1 Continuation of Existing Management ^a			Alternative 2 Low Level Management ^a		Alternative 3 Moderate Level Management ^a		Alternative 4 High Level Management ^a		Proposed Management Plan (net difference) ^b	
Forest Management (continued)	Annual harvest level of 525 mbf would significantly reduce timber resource loss due to pine beetle infestation.			Decrease to 120 mbf would significantly increase timber resource loss due to pine beetle infestation.		Increase to 600 mbf would slightly reduce timber resource loss due to pine beetle infestation.		Increase to 705 mbf for 5 years, 500 mbf for 5 years, and maintenance of 120 mbf harvest per year thereafter would significantly reduce timber resource loss due to pine beetle infestation.		ALT. 4 would increase annual harvest level by 225 mbf for 5 years, cause a minor reduction of 25 mbf for 10 years, and cause a significant reduction of 405 mbf thereafter.	
Grazing Management Program	Range improvement project development and 2 AMPs would provide a short-term benefit of 0.4% AUMs forage (846 AUMs) and a 3.4% long-term benefit of 7,010 AUMs. Range condition and forage production would be maintained on 1,254,377 acres and improved on 165,000 acres.			Four AMPs would be managed to the benefit of wildlife and watershed, producing a net short-term reduction of 0.4% (856 AUMs) less than now authorized to livestock. Range conditions and forage production would be maintained on 1,283,977 acres and improved on 135,400 acres.		Range improvement project development and 13 AMPs would produce a 2.7% short-term benefit of 5,420 AUMs and a 6.8% long-term benefit of 13,927 AUMs. Range conditions and forage production would be maintained on 737,377 acres and improved on 682,000 acres.		Range improvement project development and implementation of 29 AMPs would produce a 3% short-term benefit of 6,190 AUMs and a 9% long-term benefit of 18,464 AUMs. Range conditions and forage production would be maintained on 303,977 acres and improved on 1,115,400 acres.		ALT. 1 would maintain 2 AMPs. ALT. 3 would increase the intensity of range improvements in the short term. AUMs would increase by about 7,000.	
Lands Program	R&PP values would be enhanced on 1,020 acres.			Decrease to 520 acres would reduce R&PP opportunities.		Increase to 1,050 acres would accommodate all known public purpose needs for 10 years.		Increase to 1,740 acres would significantly enhance R&PP opportunities and values.		ALT. 4 would increase R&PP opportunities by 680 acres and accommodate public purpose needs for 10 years.	
	Exchanges in 33 areas would enhance all resource programs and significantly benefit management. Cost would be extremely high.			Decrease to 2 areas. Cost-benefit would be high.		Decrease to 3 areas.		Decrease to 8 areas.		ALT. 4 would eliminate exchanges on 25 areas but would increase exchange opportunity and public benefit in 8 priority areas.	
	Disposal of 29,000 acres would remove land base from public management.			Increase to 79,500 acres.		Increase to 102,700 acres.		No change from Alt. 3		ALT. 3 would increase the amount of land available for disposal by 73,700 acres. About 1,000 acres would be sold annually.	

Environmental Consequences

SUMMARY OF ENVIRONMENTAL CONSEQUENCES BY ALTERNATIVE
(continued)

Program/Issue	Alternative 1 Continuation of Existing Management ^a	Alternative 2 Low Level Management ^a	Alternative 3 Moderate Level Management ^a	Alternative 4 High Level Management ^a	Proposed Management Plan (net difference) ^b
Withdrawals	Withdrawal of 17 new areas (38,800 acres) would protect existing resource values and preclude mining.	Decrease to no new areas protected from mining would reduce resource protection on 38,800 acres. Would afford no protection on priority areas.	Decrease to 5 areas (10,500 acres) protected from mining would significantly enhance resource values in priority areas.	Decrease to 6 areas (19,200 acres) protected from mining would significantly enhance resource values.	ALT. 3 would decrease the number of withdrawals by 12 (28,300 acres) would significantly enhance resource values that are unique.
Corridors	Confine surface disturbance to 8 areas and protect resource values outside of corridors.	Decrease to 5 areas would moderately reduce surface disturbance and maintain protection of resource values.	Designation of 5 corridors and moving one to protect cultural resources would protect resource values.	No change from Alt. 3	ALT. 3 would decrease the number of corridors by 3 and moderately reduce surface disturbance and maintain protection of resource values.
Access	10 areas restricted from rights-of-way protect resource values from surface disturbance.	Decrease to no areas restricted would significantly increase right-of-way availability and disturbance of surface values.	Maintain 10 areas, reduce restrictions in 2 areas would enhance resource development.	No change from Alt. 3	ALT. 3 would protect resource values in 8 areas and enhance resources development in 2 areas.
Recreation Management Program	Access to public lands is improved with development of 46 roads (148 miles.) Public use opportunities are enhanced. Cost is high relative to benefit derived.	Decrease to no roads would reduce recreation opportunities significantly but would enhance protection of all resources.	Decrease to 17 roads would moderately enhance recreation values reduce accessibility slightly and provide maximum benefit.	No significant change from Alternative 3 except for cooperative access agreements.	ALT. 4 would decrease public access by 29 roads moderately enhancing recreation values and provide maximum benefit in terms of cost.
Recreation management	Recreation and scenic values would be maintained on 12,733 acres of special recreation areas and 21,000 acres of the Middle Fork area.	No change	No change	No change	ALT. 1 would maintain recreation opportunity on 33,733 acres.
	Potential management of 12 planning areas (35,480 acres) would enhance recreation opportunities and protect recreation and scenic values.	Decrease to no plans would significantly reduce recreation opportunity and provide less protection of recreation and scenic values.	Decrease to 2 plans on 5,476 acres would moderately reduce recreation opportunity and the protection of recreation and scenic values.	Increase to 13 plans for 36,347 acres would significantly enhance recreation opportunities and provide protection of recreation and scenic values.	ALT. 3 would reduce the number of planning areas by 10 (30,004 acres) and would moderately reduce recreation opportunity but would enhance recreation values significantly on 2 areas (5,676 acres) which includes the North Platte River.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES BY ALTERNATIVE (continued)

Program/Issue	Alternative 1 Continuation of Existing Management ^a	Alternative 2 Low Level Management ^a	Alternative 3 Moderate Level Management ^a	Alternative 4 High Level Management ^a	Proposed Management Plan (net difference) ^b
Recreation management (continued)	ORV designations on 1,146,540 acres would enhance recreation opportunities and protect watershed values.	Increase to 1,399,453 acres of ORV designations would be a minor increase in recreation opportunity and would protect watershed values.	Increase to 1,399,453 acres of ORV designation would provide significant increase in closed areas to protect cultural and watershed values. Open area would increase recreation opportunity and values.	No change from Alt. 3	ALT. 3 would increase ORV designations by 252,913 acres. Open designation would increase by 200 acres, closed designation would increase by 1,665 acres and limited designation would decrease by about 3,000 acres.
	Development of plans for 240 acres would enhance environmental education and protect resource values.	Decrease of plans to none and maintenance of 3 areas (240 acres) would maintain environmental education and protect resource values.	No change from Alt. 2	No change from Alt. 2	ALT. 2 would maintain 3 areas (240 acres). Environmental education use would be promoted but no management plans would be initiated.
Soil, Water, and Air Mgmt. Program	Visual resource values are managed for PRRA. 207,000 acres managed as Class II.	No change	No change	No change	ALT. 1--no change
Watershed protection	Soil and water resource values and productivity would be maintained or enhanced on 450,000 acres through management and mitigation.	Decrease to 213,000 acres would bring about minor enhancement of soil and water resource values and productivity.	Increase to 852,000 acres would moderately enhance soil and water resource values and productivity.	Increase to 1,987,900 acres would significantly enhance soil and water resource values and productivity. Surface restrictions would be added to front range of the Laramie Mountains.	ALT. 4--would significantly benefit 1,148,500 acres of soil and water resource values that would be enhanced as a result of the proposed management plan from all programs. This includes acreage containing federal mineral estates.
Wildlife Management Program	Three HMP areas (5,740 acres) are being managed to improve habitat for small game, nongame birds, and mammals; one HMP area managed for endangered species (bald eagle) habitat.	Would decrease to 1 management area (3,600 acres) for protection of endangered species habitat. No loss of wildlife values.	No change from Alt. 1	No change from Alt. 1	ALT. 4 would maintain wildlife values on 3 areas (5,740 acres).

SUMMARY OF ENVIRONMENTAL CONSEQUENCES BY ALTERNATIVE (continued)

Program/Issue	Alternative 1 Continuation of Existing Management ^a	Alternative 2 Low Level Management ^a	Alternative 3 Moderate Level Management ^a	Alternative 4 High Level Management ^a	Proposed Management Plan (net difference) ^b
Wildlife habitat management (continued)	Potential habitat management of 13 areas (58,500 acres) would maintain terrestrial habitat values, moderately enhance aquatic and wetlands habitat values, and increase small game and nongame populations.	Decrease to no (new) areas; no increase in fishery and wildlife habitats or populations.	Decrease to 4 (new) areas (3,200 acres) would maintain terrestrial habitat values and enhance aquatic and wetland habitat values, minor increase in small game and nongame populations.	Decrease to 9 (new) areas (54,160 acres)--minor enhancement of terrestrial and endangered species habitat values, moderate enhancement of aquatic and wetland habitat values, and increase in small game and nongame populations	ALT. 4 would decrease new planning areas by 4 (4,340 acres). This represents an increase in wildlife values by concentrating management on productive areas.
Special Designations					
Intensive management areas					
Pterodactyl Tracks	Cultural, paleontological, and scenic values would be maintained on 1,200 acres.	No significant change	Decrease to 400 acres would still maintain significant cultural, paleontological, and scenic values.	Decrease to 400 acres would still maintain or enhance significant cultural, paleontological, and scenic values.	ALT 3, with a decrease of 800 acres, would still provide for maintenance of significant cultural, paleontological, and scenic values. Locatable mineral exploration and development would not be available on 400 acres.
Red Wall	Recreation and scenic values would be maintained on 8,700 acres.	No significant change from removing ACEC designation.	No significant change	Area would be withdrawn from locatable mineral development.	ALT 2. would remove ACEC designation but maintain recreation and scenic values.
Salt Creek	Soil, water, and air resource values would be enhanced on 416,176 acres.	No significant change	No significant change on soil, water, and air resource values. Cultural resource values would be enhanced.	No significant change on soil, water, and air resource values. Cultural resource values would be enhanced.	ALT. 3 would cause no significant change from ALT. 1 in soil, water, and air; would enhance cultural values.
Jackson Canyon	Endangered species habitat and wildlife values would be enhanced on 3,600 acres.	Endangered species habitat and wildlife values would be maintained or slightly decreased through lack of pine beetle management.	Same as alternative 1 except beetle control would be intensified in eagle roost areas.	No significant change from ALT. 1	ALT. 3 would enhance endangered species and wildlife values by preserving habitat.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES BY ALTERNATIVE
(continued)

Program/Issue	Alternative 1 Continuation of Existing Management ^a	Alternative 2 Low Level Management ^a	Alternative 3 Moderate Level Management ^a	Alternative 4 High Level Management ^a	Proposed Management Plan (net difference) ^b
Muddy Mountain EEA	Environmental education and recreation resource values would be enhanced on 1,200 acres.	No significant change	Environmental education and recreation resource values would be maintained or slightly decreased in 675-acre natural area within EEA.	No significant change from ALT. 3	ALT. 3 would maintain or slightly decrease environmental education and recreation resource values.
Casper Sand Dunes	Fragile watershed would be maintained on 13,560 acres.	No significant change	Fragile watershed and recreation values would be enhanced.	No significant change from ALT. 3	ALT. 3 would enhance watershed and recreation values.
Natural Landmarks ^c					Natural values would be protected. Further evaluation on a case by case basis would be required.

a. Summary for each alternative is a cumulative figure that may include figures from all resource programs.

b. The net difference is the difference between Alternative 1 (present management) and the preferred management plan.

c. Potential National Natural Landmarks were added upon the request of the NPS during the draft comment period.

Environmental Consequences

Thus, the potential for conflict is high at this site. The rest of the sites encompass small tracts of land, and impacts on development of the oil and gas resource should not be significant in those areas.

The Notches Dome Archeologic District (1,600 acres) contains several cultural sites, some of which have been nominated to the National Register. The district is within an area for which the potential for the occurrence of oil and gas is rated higher. One known geologic structure (KGS) is within the boundary of the district.

There is a high probability that oil and gas exploration and development will continue within the KGS and on lands adjacent to it. The potential for conflict between preservation of cultural resources and development of oil and gas is high. Cultural resources in that area could be compromised if oil and gas activity increases and access must be provided so that the oil and gas resource can be developed. To alleviate this conflict, the following mitigation would be utilized in the Notches Dome Archeologic District.

Cultural sites within the district that are or may be nominated to the National Register will be protected so that surface development will not affect those sites.

Surface development proposals within the Notches Dome Archeologic District will require an on-site Class III inventory before surface development begins. This requirement would be voided if the BLM completes a Class III inventory for all land within the archeologic district.

Production and development of oil and gas will have priority within the KGS unless a cultural site is of National Register quality. In that case, the cultural site will be protected. Development proposals in the remainder of the archeologic district will be addressed case by case.

The implementation of Operating Order No. 1 is beneficial to mineral development in that it eases the accessibility to public lands. The protection of cultural resources is the prime goal, but the requirement for an on-site inventory in all cases would not apply. As previously pointed out, inventory would depend on a "reason to believe."

The application of the coal unsuitability criteria on federal coal land in northern Converse County has identified areas containing about 12 million tons of coal that will be eliminated from further leasing consideration. Because the quality of coal in Campbell County is higher, the short-term loss of this coal would present no significant impact.

Mining of sand and gravel or use of other salable minerals on public lands would be preceded by a cultural inventory. Either the significant cultural resources found on a particular site would be removed or the extraction of salable minerals would not be allowed. Salable minerals would not be available for use on 21 sites (4,225 acres). Sand and gravel are not available in commercial quantities on these sites. The Notches Dome Archeologic District probably contains commercial grade moss rock. That resource would not be available for use from that area. The cumulative impact on the availability of salable minerals is insignificant.

Effects on Land Uses

Protection of cultural resource sites would eliminate the use of the surface for development on 2,567 acres. Protection is not expected to create any significant impacts on land uses except along the Oregon Trail corridor and in the Notches Dome Archeologic District.

The present Oregon Trail corridor identified in the draft RMP/EIS would be relocated to avoid any conflict with preservation of the trail segments.

Mitigating measures proposed for the Notches Dome Archeologic District would solve conflicts with land uses, particularly rights-of-way. Allowing development of the oil and gas resource includes allowing the facilities associated with the exploration for and production of oil and gas.

Socioeconomic Effects

Protection of cultural sites is beneficial in a social sense in that archeological and historical values are preserved for the public's enjoyment.

Short-Term Use versus Long-Term Productivity

In the short term, all known significant cultural sites in the PRRA would be preserved. The probability that short-term intensive land use would compromise cultural sites is low. Cultural resources would be protected, or data and artifacts would be collected and catalogued before development would occur in most cases. It is expected that impacts on cultural resources would increase in the first three to five years, until the occurrence model is implemented. Thereafter, impacts would begin to decrease.

Unavoidable Adverse Effects

There is always the likelihood of losing cultural resources during surface development. Surface

Environmental Consequences



Oregon Trail ruts

inventories do not always ensure that these resources will be protected or salvaged. Loss of cultural resources will be unavoidable and adverse.

Irreversible and Irretrievable Commitment of Resources

Any cultural resource destroyed by surface development because of a lack of data, poor inventory, or simply because sites are missed during inventory would result in an irreversible and irretrievable commitment of the cultural resources.

Conclusion

The proposed plan would afford adequate protection of existing cultural sites. It presents an aggressive management program directed at preserving known cultural and historic resources. No known National Register quality sites would be compromised. For this reason, the proposed program provides beneficial effects (preservation or availability of data for public use, education, appreciation).

Energy and Minerals Management Program

Effects on Cultural Resources

The effects of oil and gas development on cultural resources in the past have been beneficial because regulations required an on-site inventory of sites prior to development. Cumulatively, these inventories provided much of the cultural data base in the PRRA. New policy (Operating Order no. 1) bases the need for an on-site inventory on a "reason to believe" cultural resources are present. It emphasizes the use of existing data in determining the occurrence of cultural resources.

There would be a slight increase in the number of sites that could be affected. The data base is lacking in many areas of the PRRA; therefore, the number of sites that will be affected is expected to increase. The amount cannot be quantified at this time. Impacts are adverse where sites are not identified and are subsequently damaged or destroyed as a result of inadequate survey.

Environmental Consequences

Under current regulations (43 CFR 3809), the BLM cannot require prospectors for locatable minerals to conduct cultural resource inventories on small prospects that are located on private surface/federal minerals. These small mining claims probably result in the loss of cultural resources. The significance of that loss cannot be determined.

The larger mineral mining operations on public lands (coal, uranium, and bentonite) would not result in the loss of cultural resources. Inventory requirements prior to development are stringent.

There is the possibility of some cultural resource losses in the Notches Dome Archeologic District. That loss would be minimal, assuming the mitigating measures described under cultural resource management are implemented.

Effects on Geology

Surface mining would affect the geology at specific mine sites. Impacts probably would be confined to the coal and uranium areas in northern Converse County.

The impact of in situ development on geology is not known. However, in situ gasification of coal and uranium would be likely to cause geologic impacts. No coal gasification is proposed at this time, but a greater interest in in situ development is expected. If it occurred, it would be confined to the available coal lands in northern Converse County. Preliminary tests for an in situ uranium project have occurred in Natrona County a few miles north of Casper. The viability of this project (commercial production) is not known.

Surface mining of sand and gravel usually has little effect upon the deeper geologic structures because the mine area is very shallow.

Effects on Topography

Oil and gas development would affect topography, but these effects usually are not significant. The rougher the terrain and the greater the slope, the higher the probability that site-specific topographic changes will occur. The steeper sloped areas in the PRRA are generally confined to mountains and foothills where occurrence of oil and gas resources is low or moderate. The number of oil and gas wells drilled in those areas has been very low in the past; however, there has been renewed interest in exploration in the South Big Horns and the Laramie Range. There is a moderate probability that these steeper sloped area would be drilled at several locations during the next 10

years thus increasing the probability of site specific topographic changes.

Surface mining would affect site-specific topographic features in the long term. Mining for coal, uranium, and bentonite would have the greatest effect on topography. Coal and uranium mining probably would be limited to northern Converse County. The terrain in that area has little topographic relief; therefore, topographic changes after reclamation should not be significant. Bentonite mining in Natrona County occurs in rougher topography, so some noticeable topographic change after reclamation would be more likely in that area.

Effects on Mineral Resources

There is a high probability that oil and gas development would occur simultaneously with other mineral development on the same site especially in southern Converse County. These conflicts would be evaluated case by case. In the federal coal lands in northern Converse County, existing oil and gas development would have precedence over new coal leasing on 5,700 acres that contain KGSs unless it could be shown that extraction of coal on a possible future lease would not interfere with the economic recovery of the oil and gas resource. Thus, coal lands containing oil and gas wells or containing KGSs could be included in a coal lease. These conflicts would be evaluated case by case and mitigated where possible.

Mitigation could consist of an agreement between operators or initiation of procedures defined in 43 CFR 3840 and 3160.

About 36,000 acres of federal coal lands containing ½ billion tons of coal are acceptable for coal development and would be available for further leasing consideration outside the Thunder Basin National Grassland (TBNG). About 164,000 acres containing about 11 billion tons of federal coal are acceptable for coal development and would be available for further lease consideration inside the TBNG. Future competitive coal leasing would be addressed in an EIS.

It is expected that most of the future competitive coal leasing interest in the PRRA (if any) will be in the TBNG. The coal in the TBNG is of better quality and higher economic potential for development.

Eleven preference right lease applications (PRLAs) outside the TBNG boundary containing about 0.8 billion tons of coal and 6 PRLAs inside the TBNG boundary containing about 0.4 billion

tons of coal would be processed within the ten-year term of this plan. PRLAs are being addressed in a PRLA EIS for the Powder River Basin area.

It is assumed that the demand for sand and gravel will increase, especially near the urban centers. Increases in other mineral development and urban development create an increase in the consumption of sand and gravel. At present, we can foresee no shortage in the availability of sand and gravel in the next ten years except in the Casper area, where the supply is short and probably will become shorter. Some of the demand for sand and gravel would be accommodated in the Casper area from the public lands, but at the cost of longer hauls.

Effects on Vegetation, Soil, and Water

Mineral development and production are extensive and intensive throughout most of the PRRA. On the average, about 170 oil and gas wells would be drilled annually in the PRRA. The well site and associated service facilities require from 5 to 10 acres, depending on the topography. For this analysis, it has been assumed that one well would require 7.5 acres and be drilled to a depth of 8,500 feet. Resources used during development of one well would be about 1,500 cubic yards of aggregate, 26 tons of bentonite, and 2,900 barrels of water (at the rate of 2.5 barrels per foot) one barrel equals 42 gallons.

Vegetation

About 1,275 acres would be disturbed each year by oil and gas activity; therefore, 12,750 acres would be disturbed in ten years. All vegetation is removed during development (well site and access road), so that it would be lost in the short term. More than 95% of the total acreage disturbed would eventually be reclaimed successfully.

The success rate for oil and gas drilling in the PRRA is about 60%. Of the 12,750 acres disturbed in ten years, 60% (or 7,650 acres where producing oil and gas wells are located) would not be reclaimed for 20 years or more. Reclamation of the remaining 40% of the disturbed area would be completed in about one to three years. This ratio is expected to change in that more exploratory wells would be drilled and the producer success will decline, thus increasing the amount of annual reclamation.

Other mineral activities—bentonite, uranium, coal, and sand and gravel extraction—will disturb, at the most, about 700 acres per year. At least as many acres would probably be fully revegetated every year as are being taken out by new mining.

Vegetation established on rehabilitated sites would be of a different quality and quantity than that on the original site. There would be fewer native species, and native shrubs would not be successfully reestablished in the short term to the extent that they were present before surface disturbance. However, productivity in terms of vegetative growth often exceeds the growth of native vegetation after a site has been reclaimed.

Soil

Mining affects soils by alteration of existing soil characteristics and properties such as soil micro-organism composition, structure, texture, organic matter content, infiltration rate, permeability, water holding capacity, nutrient level, soil-climate relationship, and productivity, all of which have developed over geologic time. Soil productivity could be lost and might not fully recover to present levels in the long term.

Soil profiles would be affected during mineral development. The topsoil is removed and unavoidably mixed when stockpiled. Mixing would be particularly critical on areas of shallow soils. Approximately 54% of the PRRA is characterized as having some shallow soil components; therefore, impacts resulting from soil mixing on these soil types would be more significant than on sites having deeper well formed soils.

Exposure, compaction, stockpiling, and possible contamination of surface soil from various spills would cause reductions in soil productivity and increase soil loss from wind and water erosion. Disturbance of surface soil material would degrade biological, chemical, and physical properties, causing reductions in productivity when used in reclamation (USDA, FS 1975a).

Leakage from reserve pits during oil and gas development has been documented on an average of 3% of the sites in the PRRA. This leakage contaminates the soil and hinders reclamation. About a 3% leakage rate would be expected annually in the next ten years. Leakage from reserve pits is generally confined to the well site.

Water

Reserve pits typically contain toxic materials, brackish water, and oil. Ruptures or overflows, drilling muds, and production fluids can contaminate live water. BLM field personnel estimate that 3 pits in 100 leak or break. The extent of the damage depends entirely on the distance the fluid travels. Usually these fluids are confined to an area near the drill site.

Environmental Consequences

Oil spills associated with oil and gas production generally occur when the oil is in transit or from blowouts during exploratory drilling and development. These spills usually are rapidly contained, but on occasion they do reach live water. Oil entering a live water body can have a significant short-term effect, making the water unsuitable for domestic and agricultural use and for wildlife and livestock. It is expected that there will be some spills that reach live water in the next ten years. The impact depends on the volume of the spill, the type of water source, and the distance the fluid travels. Intensive cleanup efforts are initiated where oil spills occur.

The temperature of produced water from oil fields is frequently high and can add large amounts of heat to receiving waters, reducing the productivity of streams. This effect is not prevalent in the resource area except at Salt Creek. Produced water discharges spot-checked by BLM field personnel in the Salt Creek oil field have had conductivities as high as 17,500 micromhos and TDS concentrations up to 13,210 mg/l. Chloride concentrations up to nearly 3,000 mg/l have been reported. The highest observed oil and grease level was 46.1 mg/l. These values are maximum observed levels. On the average, produced water from Salt Creek is within the levels set by the Wyoming DEQ. These discharges will continue into Salt Creek over the next ten years.

Very little accurate information is available on long-term changes in groundwater quality associated with existing oil and gas development in the PRRA; therefore, quantitative projections of the impacts of future developments are not reliable. It is likely that adverse impacts of groundwater quality will be highly localized and result mostly from isolated incidents such as spills and reserve pit ruptures.

Fracturing the rock in oil producing zones to induce oil flow, water injection during secondary recovery, and drilling operations could contaminate the quality of water in water-bearing formations. If drill hole casings are not properly cemented, mixing of water from different aquifers can degrade high quality groundwater. Regulations require that drill hole casing be cemented in place to a depth of at least 150 feet or more, if necessary, to prevent mingling of aquifers and contamination by toxic materials. Failures, or leaks, occur in 0.5% to 1% of the wells drilled (USDI, BLM 1980a). That failure rate is expected to continue.

New coal mining in northern Converse County is likely to occur either from new leasing or development of preference right leases. Impacts on groundwater resources during coal mining

would occur primarily in the vicinity of the mined area and would have little effect on the regional groundwater systems. Impacts would include removal or modification of aquifers, interruption of groundwater flow during mining, modification of flow after reclamation, and changes in water quality. Mining coal would result in the removal of the lowest coal aquifer mined and all aquifers above it. Coal beds are usually the most extensive shallow aquifers, whereas sandstone aquifers in the overburden and interburden are usually lenticular beds of relatively small areal extent.

Modification of groundwater flow after reclamation results from breakup of the layering that generally occurs in native formations of the Powder River Region and from modification of the slope of the land surface. In many parts of the region relatively impermeable shale layers interbedded with sandstone and coal cause perched zones of saturation to form. Where perching layers outcrop, springs or seeps occur. The replaced spoil is relatively uniform in composition, so that vertical and horizontal permeability are similar, thereby eliminating perched zones and their springs and seeps and increasing recharge to the water table.

The removal of springs and seeps from their former locations would affect the plants and animals that depended on the additional water at those locations. Springs and seeps might reappear at different locations after reclamation was completed, or the extra recharge to the water table might discharge into streams. The overall impacts of mining would be to change the pattern of groundwater flow permanently, but mining would not permanently diminish the quantity of water available in the area of the mine.

Surface runoff from reclaimed areas might be altered slightly by temporary changes in infiltration rates. The effect would be relatively minor and short-lived because infiltration on spoils would become similar to infiltration on native rangeland as root systems developed.

Discharge from coal spoils aquifers may contain concentrations of dissolved solids that are two to three times greater than those in the adjacent undisturbed aquifers. This water could be cathartic and marginal for use by livestock and wildlife. Most of the discharge from spoils aquifers would occur as small springs and seeps in ephemeral stream channels, which would delay and reduce the effect of that discharge on the quality of water in perennial streams.

The impacts of uranium mines on the water resources of the region are discussed in detail in environmental statements dealing specifically with

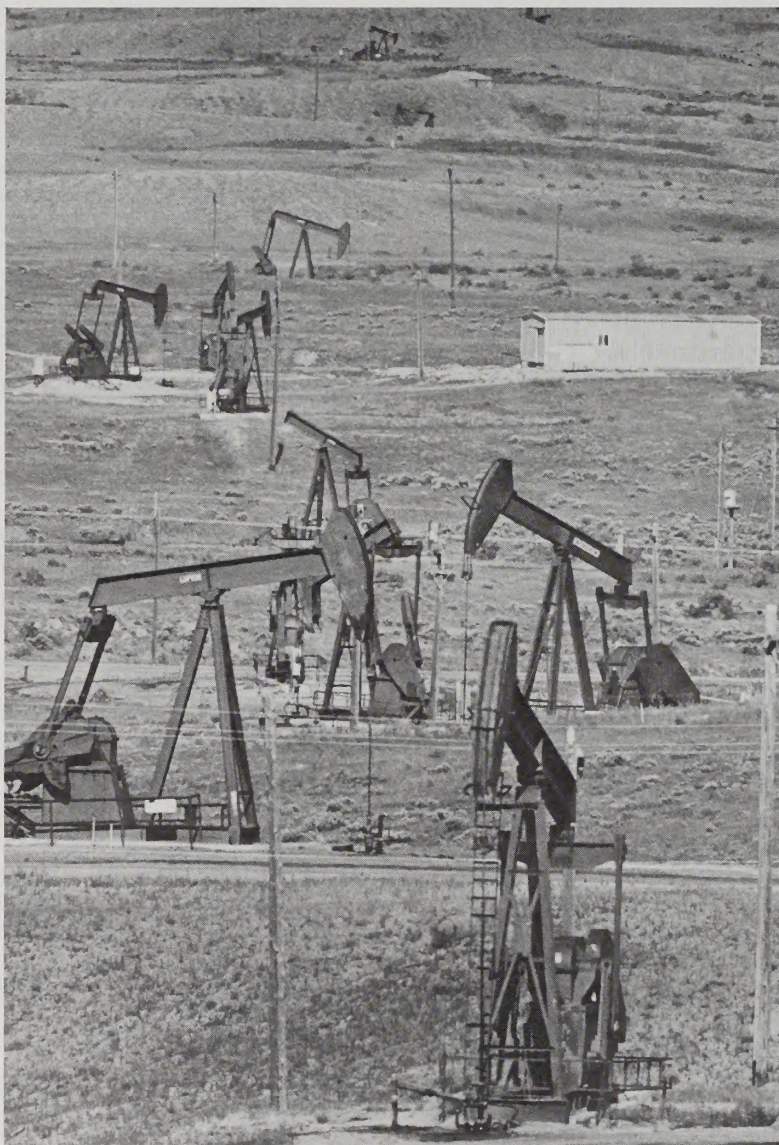
Environmental Consequences

individual uranium mine plans; therefore, no further discussion of the subject is included in this analysis.

Effects on Visual Resources

Surface mining changes the form, line, color, and texture of the landscape. Silos, conveyors, and structures change the line and color; access roads, railroad spurs, and power lines change line and texture. All the surface mines associated with coal and uranium are in relatively isolated areas. The cumulative effect on visual resources is a significant reduction in regional visual quality. That trend is expected to continue.

Oil and gas development affects visual quality in areas where the development is intensive. The impact generally is from a large number of wells in an area rather than from individual wells. The exceptions in the PRRA would be on the north face of the Laramie Mountains and the Southern Big Horns area. Oil and gas development in the Laramie Mountains probably would be visible from I-25. Depending upon the location, development in the South Big Horns could significantly affect the visual quality of that area. There is a high probability that exploration and drilling will occur in both these areas within the life of this plan.



Pump jacks on public land. Wyoming is a significant oil-producing state.

Effects on Air Quality

Normally the air quality in the PRRA meets the state and federal standards; however, poisonous hydrogen sulfide gas has been known to be produced by some scattered wells in central Natrona County when certain limestone or dolomitic formations of Permian or older age have been penetrated. Hydrogen sulfide is produced in Niobrara County near the Converse County line. It also is produced as a result of secondary oil recovery in the Salt Creek oil field, which surrounds the towns of Midwest and Edgerton in northeastern Natrona County. The Salt Creek ACEC plan (USDI, BLM 1980b) discusses this situation in detail.

Hydrogen sulfide gas as an irritant could have a long-term effect at the "nuisance" level. According to the Wyoming DEQ, nuisance levels are as follows:

70 micrograms of hydrogen sulfide per cubic meter, $\frac{1}{2}$ hour average, not to exceed two occurrences per year, or

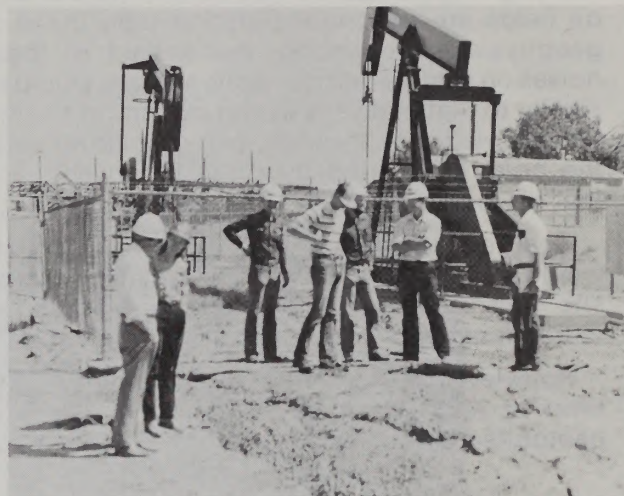
40 micrograms of hydrogen sulfide per cubic meter, $\frac{1}{2}$ hour average, not to exceed two occurrences in any five consecutive days.

Nuisance levels of hydrogen sulfide would continue in the Salt Creek area. Emissions could occur in lethal quantities at times in some areas. The emission of hydrogen sulfide is serious, and the industry and Wyoming DEQ are safety sensitive in areas where it occurs.

Oil and gas activities affect air quality through the production of dust, vehicle emissions, and the emission of gases from petroleum products. These emissions are usually restricted to the vicinity of the wells, oil fields, transportation routes, refineries, and gas plants.

Coal mines would be major contributors of particulate emissions. Fugitive dust emissions would result from a number of activities within the mines, including blasting, coal and overburden loading and dumping, haul road and access road traffic, and wind erosion of exposed areas. The impact from an individual mine would decrease rapidly beyond the mine boundary. Localized violations of short-term air quality standards could occur if unfavorable meteorologic conditions persisted for several hours.

According to a report prepared for the BLM by PEDCo (1983b), coal mining under present conditions does not violate federal primary air quality standards. It is expected that the Wyoming 24-hour standard of 150 micrograms per cubic meter could be violated from time to time.



Coordination meeting between BLM and AMOCO on the Salt Creek ACEC

Uranium mills and mines generate significant amounts of fugitive dust. The major sources of fugitive dust from the uranium mines are mining operations, access roads, and ore crushing and screening, conveying, and handling.

Small amounts of hydrocarbons, carbon monoxide, and oxides of nitrogen are released from vehicles, steam generators, and other combustion sources within coal and uranium mines. Because of the small quantities emitted, the effects on surrounding air quality are expected to be insignificant. Diesel locomotives operating on the railroad lines would increase emissions. These emissions would generally be confined to a narrow corridor following the lines.

Gaseous and dust emissions resulting from the extraction of sand and gravel are similar as those from coal mining; however, the magnitude is much smaller.

Noise Impacts

Oil and gas operations such as operating equipment, road construction, drilling wells, or pumping oil increases noise levels and can be annoying. These developments usually occur in isolated areas where the impact on people would be low. Oil fields near communities or housing units would constitute a nuisance to the inhabitants. The impacts from electrified fields would be less than those from other oil fields.

An increase in noise level—90 to 112 dB(A) as compared to 30 to 80 dB(A)—would occur during the period of seismic activity. This could disrupt

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the activities of wildlife and domestic livestock. Although the increases in noise levels in producing oil fields are of longer duration than those of geophysical exploration, the impact of these noises on wildlife and domestic animals would be similar to that of noises occurring during seismic activity. However, these animals seem to adjust to the noise generated by producing wells, and there is probably little short-term impact.

Coal development in northern Converse County would significantly raise noise levels at the mine site. Noise probably would be increased adjacent to transportation routes, particularly railroads.

Noise levels would increase to above the nuisance level at mine sites for sand and gravel and bentonite operations.

Effects on Wildlife

Wintertime oil and gas production has occurred at times over the past 30 years or more on the top of Pine Mountain with unknown, but probably minor, disturbance to bald eagles. Current oil and gas exploration and development are increasing access into eagle habitat in that area. If new production should occur, it would place human activity near the same elevation as bald eagle roosting areas. A buffer zone would prohibit oil and gas activity within $\frac{1}{2}$ mile of winter roosts. It is expected that noise and visual disturbances occurring beyond the $\frac{1}{2}$ mile buffer would cause minimal disruption to the eagles. Similar impacts are occurring at the Antelope Creek roosting area.

Production during winter could occur within $\frac{1}{2}$ mile of other roosts at Jackson Canyon, Little Red Creek Canyon, and Box Elder Creek Canyon and within $\frac{1}{4}$ mile of feeding areas along the North Platte River. However, there is little oil and gas activity in those areas. Buffer zones are considered adequate to keep disruption to roosting and feeding areas to a minimum should development occur.

Oil and gas development would destroy about 1,275 acres per year of big game habitat, mostly in summer and yearlong ranges for antelope and deer. Little disturbance occurs in critical winter ranges. Cumulatively, there is no indication that the loss of habitat significantly affects big game populations.

Very little of the 1,275 acres of sagebrush-grassland destroyed by oil and gas activities each year is important habitat for upland game. Some would be used by sage grouse, but no fields and few exploratory wells are expected to be drilled in the breeding, nesting, and brooding areas. Recent

activity in west central Converse County has included destruction of 40 acres for road and pad construction in a 1,000-acre sage grouse complex. Continued loss of this habitat could occur from oil and gas development.

Oil, gas, and coal development, which takes place mostly in the sagebrush grassland habitats, destroys active bird nests and nesting habitat. This is the most abundant habitat type in the resource area, so the loss probably is in the range of less than 1%. Rehabilitation of sites provides a long-term change in vegetative type, adding diversity and interspersed of habitats.

The sage grouse lek complex in west central Converse County has been identified as unsuitable for further consideration for coal leasing. Coal development from the Dave Johnston mine and other activities apparently have already caused abandonment of sage grouse leks west of the mine.

Mortality rates for mule deer and antelope would slightly increase in the vicinity of coal mines from a combination of poaching, road kills and accompanying urban development. Mine locations, access roads, and railroad spurs would be likely to disrupt local daily and seasonal movements.

Oil spills, leakage from reserve pits, produced water from oil development, and discharge from coal spoils can affect the quality of water and in some cases severely affect aquatic habitat. This is the exception, but it does occur on occasion. Introduction of these types of fluids to any of the major lakes, rivers, or creeks could have a dramatic effect on those habitats.

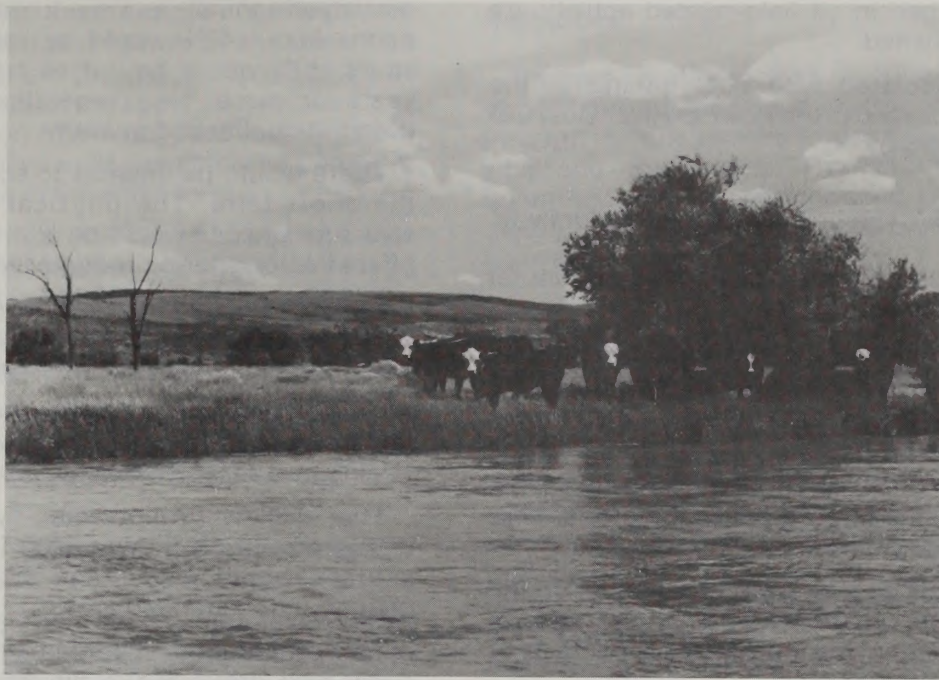
Effects on Land Uses

Farming and Ranching

Oil and gas production may affect farm and ranch operations. The extent of that impact depends on how extensive the development is and where it is. For example, a well or wells in an irrigated field would significantly increase the impact. Utilities that would serve these industries would add to the impact.

At the rate of 7 acres per AUM, about 180 AUMs of forage per year would be unavailable for livestock consumption because of vegetation loss. The loss would be long term on about 60% of that acreage. The land probably would be re-claimed within two years on the remaining 40%.

Environmental Consequences



Livestock and forage along the North Platte River

Surface mine development would result in long-term loss of livestock forage in coal, uranium, and bentonite mining areas and at sand and gravel pits. The loss at the present rate would be about 700 acres per year, or about 100 AUMs. There are no estimates on forage loss from active mining claims. The loss probably is not significant.

Recreation

Vehicular travel over undisturbed areas now suitable for primitive types of recreation would reduce the desirability of these areas for hiking, horseback riding, hunting, and other primitive types of recreation. The degree and longevity of the disturbance would depend on the method and location of exploration activities and the success of rehabilitation.

Noise, visual intrusions, and odors associated with oil and gas production could diminish an area's aesthetic value, disturb or eliminate normal use patterns, and, depending upon the actual location of the surface disturbance, minimize the importance of an area as a recreation site. At present, oil and gas development does not affect recreation because it is not occurring in the more intensively used recreation areas. It is anticipated that development will occur in the South Big Horn Mountains and Laramie Mountains. This would affect recreation use.

The health and safety aspects of oil and gas development may affect individuals engaged in recreation. Risks have been reduced through normal operating procedures, yet they persist through the potential for human error, mechanical failure, or chance. A common precaution for the reduction of the risk is the physical separation of the individual from the source of the hazard. These hazards, whether real or perceived, keep people from recreation in oil fields. In addition, some operators openly discourage the use of their fields for recreation purposes.

Effects on recreation resources from coal development could be significant if new coal mining occurred. Increases in population associated with increases in mineral development are expected to increase use of available recreation sites in the PRRA and in the state as well.

Mineral development will continue to be the source of the largest demand for various rights-of-way across the public lands.

Socioeconomic Effects

Public revenues associated with new coal production could be significant. In total, the economic health of Natrona and Converse counties will remain closely associated with the health of the minerals industry. No significant effects from oil

Environmental Consequences

and gas are expected to occur because businesses that are engaged in oil field-related activity are already established.

Effects associated with coal mining in the PRRA are discussed in the Powder River Coal EIS (USDI, BLM 1984).

Short-Term Use versus Long-Term Productivity

Oil and gas activity would damage some cultural resources in the short term.

Mineral development would affect topography and geology. The effect probably would be long term.

The prohibition of use of gravel in the $\frac{1}{4}$ -mile buffer zone near the North Platte River probably would result in a shortage of that material near Casper in the short term.

Simultaneous development of minerals on the same site would create conflict in the short-term but would not affect the long-term productivity of the mineral resource.

About 2,000 acres of native rangeland would be destroyed annually as a result of mineral development. About 42% would be rehabilitated in 2 years; 60% would be out of production for 20 years or more. New vegetation would be of different quality and quantity.

There would be impacts to soils and water in the short term. The physical and biological structure of soils would be altered, which could affect the long-term productivity of soils.

Produced water from oil development would increase the temperature of receiving waters and affect the biology of that water source.

Unavoidable localized increases in sedimentation and loss of aquatic habitat would result from mining and associated activities.

The shallow groundwater system might be disrupted during mining. The loss of watering sources would discourage stock and wildlife grazing in the affected areas.

The probability of contamination of surface water and groundwater would increase in the



Underlying deposits of sand and gravel can be found along the North Platte River

Environmental Consequences

short term because spills of oil and toxic substances are likely. Interformation groundwater contamination and leakage of toxic substances into shallow aquifers could occur in 0.5 to 1% of wells drilled in spite of the application of standard surface protection measures. This impact could render some shallow wells unsuitable for domestic and livestock use in the short term.

It is expected that the water in aquifers that develop after reclamation would be of poorer quality than that in the premining aquifers.

Mineral development would affect the visual quality in the area of development.

Air quality would deteriorate in the vicinity of mineral development. Surface mining would result in a long-term impairment of air quality at the mine site.

Noise would increase significantly in areas of mineral operations.

Mineral development would continue to contribute to the loss of wildlife and wildlife habitat in the short term and would cause the loss of about 280 AUMs of livestock and wildlife forage annually. Mineral development would generally preclude other land uses on site for the duration of the project.

Mineral development would continue to be the largest employer in the resource area and the largest contributor to wages and revenues in the short term. The economic health in the resource area in the long term is tied to the mineral industry.

Unavoidable Adverse Effects

Cultural resources would be damaged on some sites.

About 5% of the surface disturbed by mineral development would not be successfully reclaimed.

Extraction of minerals in some instances would affect the geology and topography. Impacts that might occur to geology cannot be quantified. Surface mining for coal and uranium or in situ development would have site-specific impacts on geology.

Loss of forage and habitat for wildlife use and loss of forage for livestock consumption would be unavoidable, as would loss of wildlife due to mineral development. Changes in land use that would accompany mineral development would be unavoidable.

Irreversible and Irretrievable Commitment of Resources

Damage or destruction of cultural resources would be irreversible and irretrievable. Soils lost through various erosive forces would be irreversible and irretrievable. The amount cannot be quantified. Resources produced and consumed during mineral development and production would be irreversible and irretrievable.

Conclusion

Resource conflicts can usually be satisfactorily resolved through mitigation so that mineral development can occur and the resource can be adequately protected. Although oil and gas development and the constraints upon that industry were not an issue in the RMP, the accessibility of that resource has been intensively evaluated during the RMP. Several changes in various constraints proposed in this final document increase the accessibility of the oil and gas resource. The proposed management emphasizes maximum availability of lands for mineral development consistent with providing necessary consideration for other resources.

The federal coal lands outside the Thunder Basin National Grassland that are available for further leasing consideration amount to about 555 million tons under a surface area of about 30,000 acres. In addition, coal beneath 11 PRLAs (807 million tons under about 21,000 acres) could be mined in the future after the PRLAs are processed. Federal coal lands available for further lease consideration inside the TBNG amounts to about 164,000 acres and 11 billion tons of coal. In addition, six PRLAs inside the grassland containing about 0.8 billion tons of coal would be processed.

There are no land use conflicts on these coal lands, and there was no issue related to coal developments. The amount of coal now available probably would meet any future demand for this resource in the PRRA. Thus, any future development of the coal resource within the life of this plan would be confined to the area in northern Converse County.

Potential coal leasing outside and within the TBNG would be subject to the constraints defined in appendix H and mitigation that may be defined in the final for the second Powder River Region coal lease sale and the EIS that will be finalized for the PRLAs.

Environmental Consequences

It appears that the demand for sand and gravel is being satisfied at this time. Gravel supplies from sources outside the ¼-mile buffer on the North Platte River are adequate to meet future demands. The resource within the North Platte River buffer would be available for use at some future time should the demand be greater than can be satisfied from other sources. The issue that too much sand and gravel is not available in the ¼ mile North Platte River buffer does not appear to be based upon resource availability. It appears that the issue is based upon the ease of resource recovery at the least cost. Authorized sand and gravel operations within the ¼-mile buffer on federal sand and gravel would be continued until the resource was mined out.

Fire Management Program

Effects on Vegetation, Soil, and Water

Vegetation

Fire management would affect two vegetative components, forestlands and sagebrush/grasslands. Forested areas having commercial or recreational value in the resource area would continue to be managed as full suppression areas. Fire would be used as a management tool to clean up slash produced in fuelwood and in post-and-pole harvests. This method, if used, would probably be a "pile and burn" operation; thus, the benefit would be high in reducing slash. Pile burning could sterilize soils and result in eliminating vegetative growth for several years.

Prescribed burning could be used in some forest stands to reduce fuel loads in scattered slash, to thin trees, and to prepare a seedbed for reforestation. Broadcast burning of slash in a prescribed manner would lessen fire intensity. This would result in fewer impacts on soil and vegetation than would pile and burn operations, but it would create a greater potential risk of damage to the timber stand from escaped fire. The burn would destroy the surface vegetation in the short term, but it would open up the stand and promote faster growth of the more dominant trees. The impact from using fire in this manner would be low, since the surface vegetation could be expected to be healthier and more vigorous within one year.

There would be a net positive benefit in forestland, vegetation, and in wildfire hazard reduction from the use of fire under prescribed conditions.

About 10,000 acres of sagebrush would be controlled during the next ten years. Prescribed burning would preserve broad-leaved plants and leave a grass-forb mix. Sites chosen for brush control would be those that contain a good understory of grasses and forbs, so no seeding of additional plant species would be necessary. Range condition would be likely to improve from fair to good after brush control measures. When water previously used by brush becomes available to grasses and forbs, their total biomass production should increase to two or three times the preburn amount. On some sites, sagebrush probably would reestablish itself in 10 to 20 years; in others, brush control would change the vegetative composition of native vegetation for as long as 30 years.



BLM employees initiate a prescribed burn.

Soil

Burning would cause localized short-term changes in the soils' physical, chemical, and biological properties through the consumption of ground cover and litter accumulation. The severity of the impact would depend on the fuel type and the intensity of the fire. Burning could decrease soil infiltration rates in some soils, causing accelerated erosion and the removal of some nutrients.

Burn sites would be susceptible to greater concentrations of calcium and magnesium in the surface soils. Short-term losses would be expected to be caused by the volatilization in the surface of surface minerals and nutrients such as nitrogen. Water soluble potassium could be susceptible to loss caused by short-term soil erosion. A decline in soil productivity could be experienced if soil

Environmental Consequences

erosion should become prolonged and severe. The overall effect of plant production would depend on the initial concentration of these nutrients in sites selected for burning. Typically, good grass cover has been reestablished within two years through natural regeneration.

Water

Sagebrush control by burning could change water yields, streamflow, and surface runoff characteristics for a period up to 10 years. An increase in water yield of up to 15% may be possible (USDA FS, 1975b); however, negligible water yields would be expected on sagebrush/grassland sites where average annual precipitation is below 16 inches (Hibbert 1983). An increase in streamflow of 15% or less would be expected on sites with precipitation zones of more than 15 inches (Sturges 1975). It is anticipated there would be a short-term increase of about 5% in surface runoff, followed by a net reduction in surface runoff on prescribed burn sites. Short-term pollution of nearby surface water could occur by increased sedimentation, turbidity, and total hardness (Wright and Bailey 1982).

Effects on Visual Resources

Prescribed fire would probably result in a short-term visual impact, especially in forested areas where recreation use is heavier.

Effects on Air Quality

Air quality would be poorer in the immediate vicinity of prescribed burns and wildfire and downwind for a short distance during active burning. Wyoming DEQ standards could be exceeded during such periods; however, this short-term change would be insignificant. Airborne dust would increase immediately after the burn and until grass could be reestablished.

Noise Impacts

During the period of burning, noise levels would increase from approximately 30 dB(A) to approximately 90 dB(A) because of the use of trucks and water pumps. Noise level increases would occur only during the period of vehicle and equipment use.

Effects on Wildlife

Prescribed burning would increase spring and summer forage for antelope. Such treatment in

the Bates Creek Reservoir complex has converted tall, dense stands of sagebrush to a mosaic pattern of interspersed openings. This has been beneficial for antelope and has increased sage grouse brood rearing and summer habitats (450 acres in 1983) because forbs, grasses, and insects have increased. However, escape cover has decreased.

Effects on Land Uses

There is no accurate way to predict the quantity or magnitude of impact on recreation caused by the occurrence of wildfire or the subsequent fire suppression actions. Fire damage to range vegetation most often would be short term, and recreational activities could be resumed the next year. Forested areas probably would be more severely damaged by wildfire; thus, many recreational activities could be delayed for a longer time.

Socioeconomic Effects

There would be a positive economic benefit on allotments where prescribed fire would be used. The benefit would be derived from an increase in forage.

Short-Term Use versus Long-Term Productivity

Use of fire to enhance forest or rangeland management would benefit those resources through increased forage and improved range condition. However, available forage would be reduced in burn areas for one growing season.

Use of prescribed fire would create local short-term impacts on vegetation and soils, possibly one to two growing seasons. There could be an increase in soil erosion in the short term, resulting in possible sedimentation of water sources.

Air quality would be diminished during burning. This effect usually would last one to two days. The impact on air quality could be significant during that period.

Noise levels would be increased in the short term.

Fire use would have a net benefit in wildlife habitat. However, short-term losses of vegetation could cause local reductions in habitat for game and nongame animals.

The use of fire as a resource management tool would result in the short-term effect of reduced scenic quality.

The primary effect on recreation from prescribed fire would be a short-term effect on hunting.

Environmental Consequences

Unavoidable Adverse Effects

A slight short-term increase in surface erosion would be unavoidable, as would a short-term loss of available forage.

Conclusion

There would be no irreversible or irretrievable commitments of resources under the proposed plan for fire management. Prescribed fire can be a valuable tool in managing vegetative resources. Increased use should have a net benefit for livestock and wildlife.

The PRRA currently practices 100% full suppression of all fires for the entire resource area. The procedure severely taxes our suppression capability at times, and it leaves no option for establishing priority suppression areas. The

benefits produced are not significant in relation to the cost. This policy precludes the opportunity to use naturally caused fire to enhance vegetative patterns. Without the option to use wildfire as a management tool, this alternative would only partially resolve the issue of fire management.

Forest Management Program

Effects on Vegetation, Soil, and Water

Vegetation

A total of 34,000 acres of forestland would be managed. Harvest would be concentrated on 8,000 acres. Stand improvement would be implemented for stands that have commercial potential. That potential would be evaluated by a forest inventory.



Post and pole cutting in the Muddy Mountain forest demonstration area

Environmental Consequences

About 600 mbf of forest products would be harvested annually through 1990 and 500 mbf annually through 1995. About 6 mmbf would be harvested in ten years. About 220 acres would be disturbed annually in the first five years and about 150 acres annually in the last five years. Harvests would be conducted on about 1,750 acres in ten years.

Pine beetle control in the first five years of implementation would be directed at Little Red Creek, Jackson Canyon, and Muddy Mountain. Field activities that would be needed to control mountain pine beetle infestation on Casper Mountain and Muddy Mountain are line surveys, road layouts, timber marking, and sales preparation. Acceleration of these activities would contribute to salvage of material and save residual stands. Initiating beetle control in the natural area on Muddy Mountain prevent that area from becoming a center point for reinfestation of private and state lands.

Beetle control in Jackson Canyon would result in the loss of about 400 mbf in three years because the trees cut would not be used. There is no access to the Jackson Canyon area, and the proposed plan would not allow construction of a road to allow use of the forest products. It is anticipated that the harvest efforts should effectively reduce or eliminate the beetle problem.

Intensive forest management practices would be defined in a timber management plan in the areas described below. Timber would be harvested in Deer Creek, Negro Hill, Grave Springs, South Cottonwood-Notches Dome, Baldy Ridge, Esterbrook, Salt Canyon, Hartville-Sunrise, Squaw Mountain, Banner Mountain, and Bessemer Mountain. Lower priority would be assigned to Coal Mountain, Rattlesnake Mountain, Badwater, Sioux Pass, Pine Mountain, and Bates Creek-Sheep Creek.

Management emphasis would be placed on ponderosa and lodgepole pine composition. Management practices would include cutting at least 50% of the lodgepole pine and ponderosa pine volume within stands (either clear or select cutting), dwarf mistletoe management, artificial regeneration of stands if they did not regenerate naturally in three to five years, precommercial thinning of seedling sapling stands at 10-year intervals, and commercial thinning of pole stands at 20-year intervals.

Thinning would be done throughout the Muddy Mountain EEA as needed. About 200 mbf per year would be harvested in five years as part of the PRRA's total allowable cut. The increased cut

would be directed toward beetle control. After the five-year period, the annual cut in the EEA would be 25 mbf.

Forest stands in the PRRA would revert to an annual allowable cut of 120 mbf at the end of 15 years. The program would then be carried out at the maintenance level.

Access roads needed for timber removal would destroy vegetation, but the vegetation would be reestablished after cessation of use. Moderate disturbance of vegetation would occur in pioneer routes used for timber removal and in areas of timber skidding. Some vegetative disturbance also would occur when trees were felled on slopes.

Soil

Soils would be disturbed by wind and water erosion in areas of access roads to sale areas, but the disturbance should not be significant and would be short term. Lesser erosion would occur in cutting areas. Skidding, when used, would cause moderate amounts of soil disturbance, especially on main skid trails that would be used a number of times. Some soil disturbance would occur from felling trees on slopes. Skidding and yarding operations and road construction would increase the potential for erosion.

Soil compaction would result from heavy vehicle traffic. Compaction reduces the soils' capacity to absorb moisture and results in reduced root growth, which decreases plant vigor.

Water

Selective cutting of timber, with about 50% of the trees left in place, could result in about a 10% increase in surface water production for up to 50 years, after which water production would begin to decline toward the preharvest level (Anderson 1963; USDA, FS 1975b).

No sales of forest products would be allowed where there is the possibility of introducing siltation into water sources.

Effects on Visual Resources

Timber cutting operations would result in a short-term visual impact. The impact would be most significant from cuts near intensively used recreation areas such as Muddy Mountain and Grave Springs.

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Effects on Air Quality

Air pollution could be expected at sale sites for four to five months per year, when dust levels and gaseous emissions would increase from chain saws, truck exhausts, and slash burning during the removal of forest products. Airborne particulates would remain higher until vegetation was reestablished. Air pollution would not be expected to exceed state standards; the effects would not be significant.

Burning of beetle-killed trees that would be cut in Jackson Canyon would lower the air quality in the canyon, but the impact would be short term. There should be no significant effect on dwellings west of the canyon because of the prevailing wind. No effect on bald eagles would be expected if burning could be conducted from late spring to late fall.

Noise Impacts

Noise from chain saw operation and vehicle use in cutting areas would upset the solitude of the immediate and adjacent areas and disturb wildlife. Users of nearby recreation areas might be annoyed by these noises.

During tree cutting, skidding, yarding, and hauling, the noise level would increase from approximately 30 dB(A) (probable wilderness background noise level) to approximately 90 to 95 dB(A) level during cutting and approximately 90 dB(A) during skidding, yarding, and hauling. A dB(A) level of 75 to 80 is considered to be annoying. Impacts associated with increased noise levels would include probable nonuse of the noisy area by livestock and wildlife.

Timber cutting near Muddy Mountain and Grave Springs campgrounds probably would cause diminished use of the campgrounds. Campers in open camping areas probably would avoid camping near timber cutting areas to escape annoyance from the noise.

Effects on Climate

Microclimate would be disturbed by tree removal, especially where clearcutting is practiced. More earth would be exposed to direct rays of the sun, and warmer temperatures would prevail. The effect probably would last no more than two growing seasons.

Effects on Wildlife

Pine beetle infestations resulted in significant tree losses in the Little Red Creek and Jackson

Canyon bald eagle roost areas during 1982 and 1983. Beetle-killed trees are likely to fall within five to ten years. Complete loss of the roosting habitat should not occur in these roosts. The cutting program in that area is expected to help preserve its significance for bald eagle roosting.

An access road to allow use of the timber resource in Jackson Canyon would not be constructed because such a road would have a significant effect on bald eagles in the area. We would continue to burn beetle-infested timber after cutting.

Forest management can improve the diversity of lodgepole and pine stands through small clearcuts and thinnings, and of ponderosa pine stands through selective cutting. Both practices increase openings and edges of stands, providing a better mix of cover types and increasing food for a large number of bird species. About 100 acres of stagnant lodgepole pine stands would be converted each year.

Conversion of dense, stagnant stands of lodgepole pine and ponderosa pine would be accomplished through clearcuts and thinnings. Summer escape cover for deer and elk would be changed to a mix of escape cover with openings that permit increased growth of forbs, grasses, and browse. The practices specified would change 50% of the stands during 15 years.

Wildlife would be temporarily displaced during cutting, and there could be some change in the composition of nongame bird species.

The forest management program would alter habitat for big game, upland game, nongame species, and raptors, especially bald eagles in Jackson Canyon. There would be a short-term decrease in the diversity of cover types and foods, but in the long term the diversity would increase.

Effects on Land Uses

There would be a short-term decrease in grazing and wildlife use in cut areas.

Recreation would be affected by forest management over the ten-year period in three main areas under the proposed plan. Since Muddy Mountain would continue to be managed as a natural area, timber harvest in that area would be limited to beetle control, thinnings, and select harvests. About 40 acres at Grave Springs and Buffalo Creek campgrounds would be subject to forest management. In those areas, forest management would be limited to removal of pine beetle tree infestation, post and pole cutting, and timber thinning. These activities would have moderate to high temporary impacts in the immediate area of activity.

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Effects on recreation from forest product removal could be mitigated if cutting and removal of trees for post and pole sales at or near recreational campgrounds were restricted to weekdays. Past use data have shown that summer recreation occurs primarily on weekends. For reasons of safety, removal of timber should not be permitted during hunting seasons (generally September, October, and November).

Timber harvest would affect the Muddy Mountain EEA. There would be increased traffic in the recreation area, increased noise, and a change in visual quality. This might detract from experiences in primitive camping, hiking, and environmental education.

It is expected that trespass would be significantly reduced by implementation of the proposed forest plan because field surveillance and monitoring would be increased.

Socioeconomic Effects

About 600 mbf of forest products would be available for public use annually. There would be no cumulative effect because the forest harvest program is not sufficiently large, nor does it contribute in any significant way to the local economy.

Short-Term Use versus Long-Term Productivity

Timber productivity would increase by 15 to 20% (professional judgment) on areas that are intensively managed. This would result from managing to obtain maximum growth.

Control of beetle infestation would reduce the chance of further infestation or new infestations in some areas. The problems would be prolonged in areas where beetle control would not be practiced. Cutting of beetle-killed trees in Jackson Canyon would result in a timber loss in the short term but should preserve long-term use of that area for bald eagles.

Harvesting of timber would have short-term impacts, but the long-term effect would be beneficial because stands would be healthier.

There would be a short-term impact on visual quality in cut areas, and erosion would increase slightly in cut areas in the short term. Soils and vegetation would be affected in the short term by access roads and in the cut area.

Air quality would be slightly poorer during timber harvest. Noise would increase significantly during the cut. There would be a short-term effect on microclimate within the cut area. Wildlife would be temporarily displaced in the short term.

Unavoidable Adverse Effects

The loss of 400 mbf of timber products that would be cut and not utilized in Jackson Canyon would be adverse.

Irreversible and Irretrievable Commitment of Resources

The trees harvested would be an irretrievable commitment of resources, but it would not be irreversible. About 6 million board feet of timber would be cut and utilized in ten years.

Conclusion

Timber harvest would increase to an annual yield of 600 mbf on 8,000 acres of productive forestland and 26,000 acres of nonproductive forestland.

The proposed plan considers a wide range of forest management actions such as inventory and reconnaissance. It does not place a singular emphasis on cutting. Management would be initiated to promote regeneration of new forest stands through cutting, thinning, and planting as necessary.

The proposed forest management plan would promote a longer supply of wood products, but it would not sustain a long-term forest management program because the resource base is not present in sufficient quantity in the PRRA. The annual cut would decrease to about 120 mbf in fifteen years and could be maintained at that level.

Grazing Management Program

Effects on Vegetation, Soil, and Water

Continuation of grazing in the Table Mountain and Bates Creek allotment systems would have long-term beneficial effects on soils. Rest from livestock grazing during critical growing periods would improve plant vigor, reproduction, and litter accumulation and increase the organic matter content of surface soils. This would cause beneficial changes in soil structure, permeability, and productivity. It also would result in a reduction of sediment in streams in Bates Hole; consequently, water quality would be expected to improve in the North Platte River downstream from Bates Creek in the long term.

Construction of range improvement projects proposed for this alternative would improve range condition on 165,000 acres. Fences and water

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developments would improve livestock distribution patterns and proper livestock use. It is estimated that distribution patterns would be improved on 130,000 acres. However, overgrazing would still take place in the area immediately around water sources. A minimum of 100 acres in riparian areas would be fenced and rested to improve range conditions.

Soil condition and water quality could be improved on up to 100 acres of riparian habitat and subirrigated meadow through the development of range improvement projects.

Vegetation manipulation would be practiced on 19,975 acres. About 8,000 acres would be completed in ten years. Chemical treatment converts a sagebrush/grass/forb ecosystem to predominantly grass; prescribed burning promotes a grass/forb mix. If prescribed burning was the method of brush control selected, there would be little long-term negative effect. Chemical brush and weed control could result in pollution of surface water if spraying was done near or over streams or other bodies of water. This could cause destruction of aquatic vegetation and possibly of aquatic animal species. The potential for such effects is considered low because each proposal is evaluated case by case, and the spraying would not be allowed without mitigation of impacts.

Grasshopper control on 20,000 acres a year could result in contamination of surface water and destruction of aquatic insects and fish if overspray should occur. The likelihood of this occurring is low.

Soil compaction and erosion would be increased on 331 acres in the vicinity of 199 new water developments and along 95 miles of new fence; however, up to 130,000 acres of watershed condition could be improved by the developments, which would promote improved distribution of livestock and wildlife. About 350 acres of vegetation would be adversely affected through development of new water sources.

Effects on Visual Resources

Since all proposed grazing projects must meet requirements to avoid high visual class areas, no significant adverse effects on visual resources would be expected.

Effects on Wildlife

Allocation of forage to big game animals in lieu of use by livestock would improve vegetative conditions for wildlife by reducing the total use of

forage preferred by big game. This is viewed as an opportunity to improve wildlife forage conditions rather than as a way to solve use conflicts between livestock and big game. Such conflicts have not been recorded. The practice probably would not cause a reduction of livestock forage. Some additional effort on the rancher's part to move livestock out of big game ranges by the proper dates would be required. Typical critical winter ranges for deer and elk in the PRRA are grazed by livestock during the summer.

Range management would emphasize studies and monitoring of potential competition for forage between livestock and big game. Studies would be directed at the Aetna and Willow Creek pastures (deer and elk); the Garrett, Steinle, and Mills pastures (deer); and the Garrett pasture (antelope). If four or five years of studies indicated a forage problem, then livestock adjustments on the small percentage of public lands in the elk ranges would bring about a minimal improvement. Livestock adjustments, if needed on the deer critical winter ranges, would improve browse condition and availability.

Spraying of sagebrush would increase annual forbs in the short-term, grasses and perennial forbs in the long term, and insects during short and long terms. However, a larger percentage of sagebrush would be killed and larger areas that are cleared would not be used by sage grouse because of the lack of edges (interspersed habitats), so the increased foods would provide only a limited benefit to grouse. Extensive prescribed burns and sagebrush spraying would not be conducted in deer and antelope critical winter ranges.

Fence construction would increase the restrictions on big game movement. Antelope movement through migration routes and critical winter ranges could be hindered. Severe winters in combination with these fences could cause heavy losses to some herds. Water projects developed in critical winter ranges could further accentuate competition between livestock and big game, causing decreased foods and vegetative cover. Range improvements would be evaluated for effect on wildlife and would be coordinated with the management objectives defined for the wildlife program.

Project development of wells and springs would increase sage grouse and dove summer habitats but cause decreases in food and cover because livestock would shift grazing patterns to nearer the new water supplies.

Prairie dog towns could be poisoned, provided that they would be searched first for presence of

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black-footed ferrets. Any prairie dog towns treated with poison would reduce the potential habitat available to ferrets. Poisoning of prairie dog towns also would reduce habitat for nesting birds and food for raptors. The burrowing owl, in particular, would have less nesting habitat as prairie dog burrows deteriorated.

Effects on Land Uses

Livestock Operations

The proposed grazing management would benefit livestock operations because water developments would make more livestock forage available and improve livestock distribution. Improved weight gains in livestock could be expected because livestock would have shorter distances to travel for water. Improved distribution would prevent the future loss of AUMs in previously overgrazed areas.

Additional fencing would make it easier for ranchers to move their livestock. Additional livestock grazing within the stock driveways would be beneficial in terms of additional forage for some ranch operations.

Recreation

The primary impacts from grazing on recreation would be in riparian zones or in established camping areas. In some cases, grazing reduces the desirability of a site so much that recreationists choose not to participate in an activity. However, in most cases, recreationists and livestock can coexist on the same site if use by either is not too heavy. To date, grazing intensity has not been a major adverse impact in high use recreation areas.

New facilities (95 miles of fence proposed) would somewhat restrict the ease of movement of hunters and recreationists. Cattleguards, which would mitigate movement constraints, would be considered for public access roads and trails.

Socioeconomic Effects

There would be a net long-term gain of AUMs and a net increase in permitted livestock AUMs from 203,704 to about 211,000 if all the increase is allocated to livestock. However, no allocations will be made until a monitoring program has been completed to record and evaluate actual increases in forage production. That forage increase represents a significant economic benefit to the operators. It is likely that a significant reduction in the availability of forage could create severe hardship on many operators.

Short-Term Use versus Long-Term Productivity

In the long term, range condition would improve on 165,000 acres. That distribution pattern would be improved on 130,000 acres in the short term.

Fencing riparian areas would increase range condition in those areas in the short term. Manipulation of vegetation would decrease sagebrush and increase forage productivity in the short term. About 350 acres of vegetation would be affected in the short term by development of water sources.

There would be a net long-term increase of 7,000 AUMs. In the short term, there would be an increase of 1,000 AUMs.

There would be no unavoidable adverse effects and no irreversible or irretrievable commitment of resources under the proposed grazing management program.

Conclusions

There has been a gradual historic improvement in range condition. The areawide range condition is good. Overgrazing, when it does occur, is sporadic and isolated, and it tends to occur in different areas from year to year. There does not appear to be any significant use conflict between livestock and other uses. The exception is Table Mountain. That conflict would be resolved under the proposed plan.

The grazing management plan would allow supervision of "I" and "M" allotments, manipulation of livestock as needed, and reaction to grazing problems as they occurred. Overall, range condition would not decrease in any allotment.

Lands Program

Effects on Cultural Resources

Standard inventory and site mitigation requirements in advance of land disposal or other land use authorizations that involve surface development would be expected to prevent the loss of cultural resources. Adverse effects can occur when sites are not recorded in an adequate survey or are damaged or destroyed by surface-disturbing activities. This is expected to occur about 1% of the time in land use proposals that involve surface development.

Withdrawals are beneficial in that they preserve cultural resources that might be located within the withdrawal boundary. Usually, lands are withdrawn from operation of the 1872 mining law.

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Such withdrawals eliminate exploration for and possible mining of locatable minerals.

Any mining that might occur inside the Alcova Pterodactyl Track area would have a significant impact on paleontologic resources. The area does have value for various salable minerals, but at present it has no apparent value for locatable minerals. The Alcova site would be one of the areas proposed for withdrawal. It is anticipated that about 400 acres would be in the withdrawal.

Corridors usually have a beneficial effect on cultural resources. The corridor route is inventoried and the corridor is routed so that significant sites are avoided. The present Oregon Trail corridor was established by virtue of existing lineal facilities. The continued placement of facilities along that route could compromise the integrity of trail segments along the route of that corridor. The impact would result from placement of facilities adjacent to these sites and not from destruction of the trail segments. For this reason, the Oregon Trail corridor would be relocated.

Effects on Topography

Corridors could affect topography. Major facilities are placed in corridor, and the amount of surface disturbance increases with the size of the facility. The effect on topographic features probably would be low because the corridors are routed around abrupt topographic changes.

Effects on Mineral Resources

Disposal of public lands could result in a financial impact on the oil and gas industry through the creation of split estate. Industry representatives would be required to negotiate access and payment for surface disturbance with private landowners. However, the access availability of the oil and gas resource would not be diminished.

Lands utilized for public purpose use are segregated from mining locations, and mineral leasing on those lands could be restricted or prohibited. This would occur on 1,740 acres. About 300 acres of the land identified for public purpose have high potential for the occurrence of oil and gas.

Disposal of isolated tracts of public land that contain economically minable subsurface coal in northern Converse County could be detrimental to future development of the coal resource. Potential future development would be determined by the surface owner. The development cost for a potential coal lessee could increase significantly.

Disposal of the surface by sale or exchange could impose restrictions on availability of minerals. The minerals would probably be reserved to the United States and therefore legally available for development. However, development usually is a negotiable item for the surface owner. The only way to mitigate the effect of disposal is to retain the surface of lands containing extensive claims or valuable mineral resources. Current policy requires a mineral report before a tract is sold or exchanged. If a particular tract contains valuable minerals, it probably would not be disposed of.

Exploration and development of locatable minerals is authorized by the mining law of 1872. Only lands withdrawn from that law would be unavailable for exploration and development of locatable minerals. The proposed plan would withdraw four areas containing 7,200 acres. The Platte River protective withdrawal would be retained at 3,300 acres. The total area withdrawn would be 10,500 acres. These withdrawals would protect cultural, recreation, and wildlife values. The new proposed withdrawals would include the Pterodactyl Track site near Alcova, the Muddy Mountain EEA, the Table Mountain wildlife unit, and the eagle area at Jackson Canyon. There is no locatable mineral exploration activity or development on or near these areas.

The withdrawals would be subject to any prior mining claims on record, or the BLM would initiate a validation of those claims. Valid claims inside a withdrawal area would defeat the intent of the withdrawal—protection of surface resource values.

One area now withdrawn from oil and gas leasing and mineral locations would be maintained, the Naval Petroleum Reserve (9,500 acres). The petroleum reserve is under development; therefore, there would be no loss of the oil and gas resource. The Camp Guernsey withdrawal (5,800 acres) has been recommended for modification to allow oil and gas leasing subject to a "no surface occupancy" stipulation on the entire area. Camp Guernsey is in an area classed as having low potential for the occurrence of oil and gas.

Most other withdrawals in the resource area that are managed by other federal agencies would be continued. The notable exceptions would be revocation of the coal leasing withdrawal and revocation of reclamation withdrawals by Public Land Order (PLO) 5444 (as modified by PLO 6527). The coal withdrawal has no effect on land uses or other mineral development. The reclamation withdrawals affect private land in which the United States has reserved only ditches and canals.

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It is expected that withdrawing the four proposed areas from operation of the 1872 mining law would also restrict accessibility for oil and gas development because of the standard leasing restrictions (appendix C in the draft) and the land use planning decisions (appendix B). Oil and gas leasing is a discretionary action, but it is assumed that if locatable mineral development is not allowed, then oil and gas development probably would be restricted. Some of these areas could be drained by peripheral wells. However, some of the oil and gas resources, if they exist in these areas, probably would not be available for surface development because of restrictions.

Corridors would have a beneficial effect on oil and gas development. Major transporting pipelines would benefit from placement in a corridor where land use conflicts have been reduced or eliminated. The smaller lineal facilities for oil and gas wells would not be constrained by placement in corridors.

One area closed to the placement of lineal facilities could have a significant impact on the development of oil and gas. The South Big Horns area is extensive, and the prohibition of rights-of-way would make development of the oil and gas resource difficult. For this reason, rights-of-way will be allowed in the South Big Horns in certain areas with the restrictions defined in appendix B under L3.

The Pine Ridge area contains one producing oil field and several other fields near the boundary of the ridge. Eliminating the placement of rights-of-way would severely restrict development of the oil and gas resource. Rights-of-way will be prohibited only on Pine Ridge. The remaining eight areas are small, and bypassing these areas should present no significant effect on development of the oil and gas resource.

Acquiring access across 38 miles of private land would significantly increase access to the public surface lands. This access would have a beneficial economic effect on developing the oil and gas resource because some access across private lands would be provided.

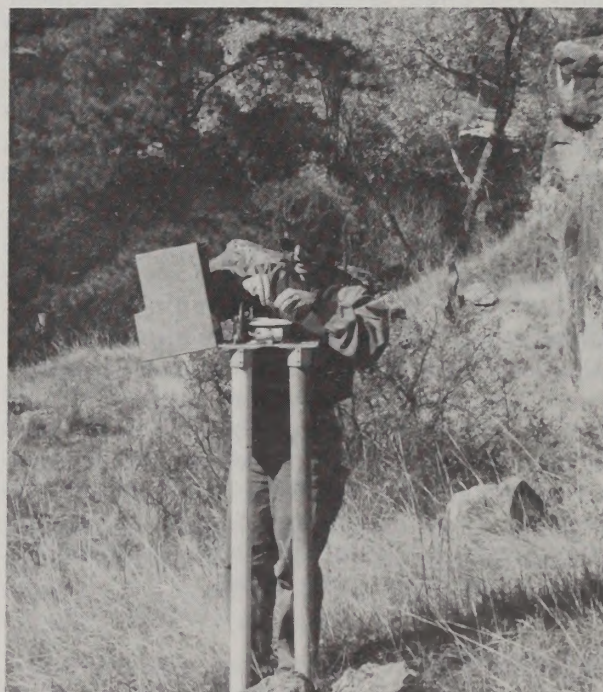
A good analysis of the major impacts of rights-of-way is provided in the PRRA oil and gas EA (USDI, BLM 1982b). The impacts of corridors are basically the same as those created by individual rights-of-way. However, the impacts are intensified both by confinement of many rights-of-way to a small area and by the greater significance of impacts resulting from construction of major facilities.

Effects on Vegetation, Soil, and Water

Application of standard stipulations, site-specific mitigating measures, and the use of routing alternatives can reduce or eliminate many potential impacts such as disturbance of wildlife, loss of critical habitat, excessive soil erosion and loss of vegetation, and impacts on other important resources.

The impacts of rights-of-way, including access acquisition, vary according to the kind of activity associated with the right-of-way. Overhead utility lines have minimal effects on the soil resource. These impacts would be similar to the impacts described for geophysical exploration. They could be mitigated by existing surface protection decisions and standard stipulations.

The establishment of underground pipelines results in the removal and subsequent mixing of the soil materials. Current stipulations and surface protection decisions effectively mitigate these impacts.



Collecting hydrological data

Both surface water and groundwater can be contaminated during right-of-way construction, maintenance, and operation, when there is a high potential for surface disturbance, erosion, and sedimentation. The greatest hazard to surface water quality occurs during construction of pipelines and roads, particularly when drainages

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must be crossed, because of the extent and depth of surface disturbance. When properly applied, the standard stipulations applicable to right-of-way construction provide moderately effective mitigation; nevertheless, the residual impacts of a road network and associated vehicular traffic could be expected to increase sediment yields above background levels.

Effects on Visual Resources

Rights-of-way would have a short-term impact on visual quality during construction. Long-term impacts would be from above-ground facilities, roads, cuts, and power lines. Revegetation on those areas would result in vegetal composition on the revegetated areas that differs from surrounding native vegetation.

Effects on Air Quality

During construction of rights-of-way, generated dust is the largest contributor to reducing air quality. The effect is usually confined to a small area around the project. Highways and pipelines are the projects that present the most severest dust problems. The effect usually lasts only for the time it takes to build the facility. Highway construction may last one to several years; other right-of-way construction might last from days to a few months.

Noise Impacts

Noise levels would increase in the vicinity of sanitary landfills, areas of agricultural development, developments for small business, and rights-of-way corridors during periods of construction and reclamation. Levels would increase from approximately 30 dB(A) to approximately 100 dB(A). The increase would cause avoidance of these areas by livestock and wildlife during the periods of increased noise levels.

Effects on Wildlife

R&PP leasing or disposal of 480 acres on Casper Mountain probably would eliminate that area as summer elk range. Visitation would increase, and the elk would probably abandon that area. The Casper Mountain area is intensively used for recreation and is, at present, a network of various parks, camps, and summer homes. That trend will continue and it would seem that the elk would eventually abandon that area regardless of the public purpose use on public land.

Withdrawals in support of wildlife habitat would have a net long-term benefit through habitat preservation. These withdrawals would be implemented at Table Mountain and the Jackson Canyon ACEC.

Sales of parcels in deer and antelope critical winter range could, if land use changed, cause destruction of food and cover. Disruption to wintering herds would cause a decrease in the vigor and survival of stressed animals. For this reason, parcels in critical big game winter ranges would not be disposed of. Disposal actions are preceded by an extensive inventory. This should prevent the loss of tracts containing important wildlife habitat.

Acquisition of 20 acres in the Table Mountain unit by exchange would increase food and cover for pheasants, doves, and rabbits on the upland portion. It also would increase nesting and brooding cover for waterfowl on the lower portion, through which Dry Creek flows.

Rights-of-way would have a short-term impact on wildlife through habitat loss and temporary disruption. Access into areas that are now isolated might increase poaching and wildlife harassment.

Effects on Land Uses

Each of the major categories in the lands program would affect various land uses. Disposal of the public lands can be initiated through R&PP use, exchange, or sale or through specific lease arrangements. Identification of lands for disposal only under the R&PP Act precludes disposal by other methods and reserves the tracts for recreation or public purpose uses consistent with the act. When tracts are adjacent to established recreation areas or communities, disposal for other than public purposes may not be in the best public interest can mean the loss of opportunities to meet important public needs or to accommodate projects of local significance. The time limit placed on this restriction provides some flexibility, in recognition that disposal parcels inside Casper's growth boundary by other means might still serve the public interest.

As the "Lands" section of appendix B explains, land can be used for sanitary landfills under the R&PP Act. Landfill needs have been identified in seven areas. An average of 40 acres or less per landfill is common. Impacts from landfills would be high locally on approximately 300 acres if all the sites identified were developed for that purpose. Development of all these sites for landfill purposes is not likely.

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Disposals under the R&PP Act improve recreation and public purpose opportunities. In many cases, developments are made and services are provided that would not otherwise be available and are not within the BLM's capacity to provide. The cost benefits of the act can be substantial and may provide the only economically feasible means for proceeding with many public projects.

About 1,700 acres have been identified for disposal under the R&PP Act. After 1987, 470 acres of this could be disposed of by other means. These areas are the Casper growth area and Gray Rocks Reservoir.

Both positive and negative effects would be associated with R&PPs. Public access would be improved, since the lands must remain open to public use and legal access must be acquired by the prospective applicant. Grazing and mineral activity are usually incompatible with or precluded by the project and must be terminated.

The costs of processing exchanges can be very high. Eight areas would be identified for exchanges. Positive effects of acquisition through exchange would be the improvement of management efficiency and quality and the reduction of costs when public land holdings are "blocked"; enhancement of resource values and management opportunities; improvement of public access; and reduction of land and resource use conflicts through elimination of inholdings.

Negative effects of acquisition through exchange would be the possibly high cost of completing land acquisition actions and possible displacement of current lessees (one ranch may suffer a reduction in lease lands while another benefits from an increase).

Sales are the simplest means of disposal and the most cost effective. About 102,700 acres have been identified for disposal in the PRRA. Ownership would change, but the change in land use cannot be predicted. On the basis of current funding levels, approximately 1,000 acres per year could be disposed of. Site-specific examinations before a tract is sold might reveal that certain parcels are unsuitable for disposal; such lands would be retained. Market conditions or the characteristics of particular tracts could make the acquisition of land offered for sale unattractive to prospective buyers, further reducing the probability of disposal.

Sale of isolated parcels of the public land would have several beneficial effects. Management costs would be reduced by eliminating management responsibility on small, undesirable parcels. Federal funds currently expended on these parcels

could then be redirected to higher priority lands for a more intensive and effective management effort. Private land management efforts also could be enhanced through elimination of federal inholdings.

Disposal would provide opportunities to put lands to high uses, both public and private, and to meet important local, state, and national needs.

A high percentage of the small, isolated parcels lack legal access, so that disposal would have no negative impact on public use and recreation opportunities.

Grazing lessees and owners of surrounding land would be most affected by sales. The bulk of the sale land is rangeland on which grazing is currently authorized. Many ranchers might be unable to purchase these parcels in competitive sales.

Other negative effects from sales are that public lands would no longer be available for public use, so existing and future public recreation opportunities would be eliminated. Surface values (not minerals) would be transferred out of public ownership and management by the BLM; thus future opportunities for federal development and enhancement of resource values would be lost. It must be noted that these lands are rarely used at present because most have no access. That situation is unlikely to change.

Land could be leased or disposed of for such uses as agricultural development or small business sites. Current decisions allow for agricultural development in Natrona County; the other counties would be handled case by case. Approximately 14,000 acres within the resource area have been identified as potentially suitable for agricultural development. Limited interest and lack of water and suitable soils would be expected to limit agricultural developments.

Because of the small acreages involved for small business sites and the limited potential for more than a few sites in the resource area, the impacts would be insignificant.

Withdrawals would affect various land uses. Most notable would be the impact on mineral development and land use authorizations. Other resources such as wildlife, recreation, and the cultural program would benefit from withdrawals. Withdrawals are by their nature protective; thus, land uses that promote surface development would in all likelihood be excluded.

Designated corridors have been located to reduce the resource and land use conflicts as much as possible. Construction "windows" (sea-

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sonal restrictions) would further reduce impacts caused by displacement of wildlife during critical periods.

One corridor along the Oregon Trail is no longer viable. It is filled in two areas, and further use might cause significant, irreversible impacts to the remaining ruts still present on the trail. Two other corridors, I-25 east of Casper and Wyoming Highway 59, are inconsistent with the criteria since only a very small amount of public land is present. Still another corridor along the North Platte River is in conflict with other programs and planning decisions. Potentially significant impacts to watershed, soils, stream quality, recreation, and scenic quality could result from increased use.

A few of the areas closed to rights-of-way need to be redefined where closure is clearly not applicable. This causes unnecessary delays and added costs for applicants and may preclude a viable, needed proposal. Closure of the areas to rights-of-way would preserve them from the impacts associated with construction. Areas might be closed if they have one or more constraints such as unsuitable soils, very rough terrain, or excellent scenic quality that would be unavoidably affected to a significant degree. Some economic hardships on applicants might occur.

Socioeconomic Effects

Revenues to local governments would be increased by land disposal actions because these lands would then be placed on the tax rolls. Such revenues would exceed present-day payments in lieu of taxes.

Disposal would provide opportunities to put lands to higher uses such as commercial, residential, industrial, agricultural, developed recreation, public services, and other public and private uses to meet important local, state, and national needs. Individual property taxes would be increased.

In a cumulative sense, there would be no significant economic or social effect.

Short-Term Use versus Long-Term Productivity

R&PP lease or disposal of 480 acres on Casper Mountain would eliminate the area's use as summer elk range. Acquisition of easements would increase harvest. Assuming these areas would be developed, this impact would be long term.

Rights-of-way or other intensive land uses would create short-term impacts on vegetation, soils, and water.

Segregation from mining would prohibit exploration, development, and use of locatable minerals in withdrawn areas. The primary impact on mineral developers would be economic, since the existing minerals would be unavailable. Closure to mining would protect existing or potential resource values, public land improvements, and existing and future uses and users.

Sanitary landfilling would result in the disturbance of up to 5 acres per landfill annually, depending on the location of the facility. Construction of these facilities would cause soil loss through wind and water erosion. Soil compaction would occur in areas receiving heavy vehicular traffic, and compaction would cause increased runoff. Groundwater might be affected through percolation of runoff water down through the garbage and subsoil into aquifers; however, such contamination would not be likely to occur.

Short-term impacts from rights-of-way would occur during construction and until reclamation was completed. Long-term impacts might be present in the form of visual intrusion, access roads, and scars.

There would be short-term impacts on air quality and noise during construction of rights-of-way.

Tracts used for R&PP use would provide an immediate benefit to the public. Access acquisition would enhance use of the public lands.

Closure of areas to use for rights-of-way might affect other authorized uses of the public lands.

Sales would have an economic benefit for public resource management and increase the economic return on isolated parcels that would be sold.

Unavoidable Adverse Effects

Some land uses would result in the permanent loss of vegetation. Erosion would increase in areas used for rights-of-way.

Sanitary landfills authorized on the public lands would result in an adverse impact on groundwater and soil.

Elk habitat would be lost on Casper Mountain.

Irreversible and Irretrievable Commitment of Resources

Public land that would be sold or exchanged would be irreversibly committed and irretrievable.

Environmental Consequences

Conclusion

Identification of 102,000 acres for disposal would promote an aggressive program directed at reducing management costs. It would provide an extensive pool of land that would provide maximum flexibility to improve land management by sales and exchanges. The proposed plan would allow maximum use of the public lands for public purposes, provide a broad base pool of land that could be used for exchange, focus specifically on sites that meet the withdrawal criteria, provide a realistic approach to corridors, and provide for access keyed to areas of high demand and use.

Right-of-way restrictions in eight areas and easing of right-of-way restrictions in two others would protect the more fragile areas. Necessary rights-of-way would be allowed in the two areas that contain oil and gas leases (assuming oil and gas would be produced from these leased areas at some future time).

Withdrawal proposals would be confined to areas that contain unique resources. Pursuit of four withdrawals would be realistic.

Access acquisition should promote a higher use of the public lands and would provide a high benefit to the public.

Recreation Management Program

Effects on Cultural Resources

Adverse effects would be possible if recreational access into culturally sensitive areas should lead to damage or destruction of sites resulting from off-road vehicle use, unauthorized artifact collection, vandalism, or other acts of destruction, intentional or unintentional. Beneficial effects such as education and public appreciation occur as a result of identification, recording, and interpretation of cultural resources. ORV restrictions would benefit cultural resources by limiting surface disturbance, thereby contributing to cultural resource preservation.

Management and protection of cultural resources tends to support recreational use so far as visual integrity of the environment is concerned. However, prohibition of surface disturbance would prevent off-road vehicle use along 1,985 acres of the Bozeman and Oregon-Mormon trails.

Effects on Mineral Resources

Management of four recreation areas through RAMPs would deter development of the oil and

gas resources within the boundaries of Muddy Mountain (12,000 acres), Goldeneye (1,153 acres), and the North Platte River (320 acres). The potential of the Muddy Mountain area for oil and gas is rated low. The remaining areas are rated as having high potential. Goldeneye would present the greatest effect on oil and gas development because some of the resource probably could not be drained by peripheral wells. No development is adjacent to the Goldeneye area at present; however, that situation could, of course, change in the next ten years.

The Muddy Mountain EEA (630 acres) would be proposed as a withdrawal area. If the withdrawal is approved, that area would be closed to the location of and future development of locatable minerals. No claims have been filed in that area to date.

ORV designations that close areas, in this case 1,985 acres, would prevent vehicle use on the surface. That would prevent exploration and development of minerals unless resource recovery occurred from lands adjacent to these sites. The remaining ORV designations for the PRRA would not affect the exploration for or development of mineral resources.

Effects on Vegetation, Soil, and Water

Off-road vehicles can cause excessive damage to plants. High timber areas, wet and dry meadows, dry grass, forbs, or brush, and big game winter ranges are susceptible to damage. Much of Natrona County is a high desert with slow regenerative potential following disturbance. Many lower elevation areas would require 10 to 15 years to recover if vegetation was removed or severely damaged. Adverse impacts that could occur are reduction of forage production, deterioration of esthetics, loss of wildlife cover, decrease in tree production, and loss of the hydrologic function of soils.

Plants where loss is attributed to ORV use range in size from groundcover plants to large shrubs and small trees. Certain types of plants, and plant communities such as alpine meadows, are potentially fragile and vulnerable to ORV damage. ORV use would be restricted in these areas.

The proposed ORV designations will eliminate many of the problems described. However, there is simply no way to police all the public land in the PRRA for ORV compliance. It is expected that some damage from ORV use will continue throughout the life of this plan.

Environmental Consequences

Additional project development at recreation sites would increase the area of disturbance on those sites. However, the availability of these recreation sites should decrease the impacts on soil, water, and air in the short and long terms. Use would be concentrated more in the recreation sites; therefore, there would be less dispersed recreation activity.

Effects on Wildlife

Recreation use at Goldeneye wildlife and recreation area causes some disturbance to nesting and brood-rearing waterfowl. Most disturbance occurs on the south shore, east of the parking area.

Overnight camping at Goldeneye might cause increased disruption of waterfowl nesting if visitors roamed the shore and adjacent uplands. If ORV use off the designated roads should increase, nests would be destroyed. This potential problem would be addressed in the activity plan for that area. Increased use supervision would help to mitigate much of the potential problem.

Recreation management of the North Platte River Trappers Route landings would result in loss of whatever waterfowl nesting takes place on these public lands. Nesting probably would shift to private and state parcels.

Recreation use on the Muddy Mountain complex is expected to increase significantly in summer and winter. The greatest potential for impact is in winter, because the area is critical elk winter range and increased activity during that time could affect the elk. We believe that the impact could be mitigated to allow both uses, but the success of mitigation depends on how much use occurs and how well visitors adhere to the rules established for the complex.

Effects on Land Uses

As recreational activity in the PRRA has increased, use problems have also increased. Increasing ORV use has resulted in vegetative damage, increased erosion, and reduction in scenic quality. Firearm damage to signs is common on Muddy Mountain. In the past few years, most ranchers on Muddy Mountain have reported increasing occurrences of gates left open, gates destroyed, erosion and rutting from ORV use, harassment of livestock, and theft and vandalism to corrals, trailers, cabins, and other private property.

Recreation management would be intensive at Muddy Mountain, Goldeneye Reservoir, the North

Platte River, and the Oregon-Mormon Trail. This would affect 17,833 acres, or 1.3% of the public lands in the PRRA, and provide for quality recreation opportunities.

Present management on 21,600 acres in northwestern Natrona County is provided through the joint implementation of the Middle Fork RAMP between the PRRA and the Buffalo Resource Area. These are the four most intensively used recreation areas in the PRRA. Use rivals and in some cases exceeds some of the well known sites in Wyoming. Focusing management at these sites would accommodate the expected increased use and prevent deterioration of those sites from overuse in the short term.

Four other areas would be managed to facilitate the use of public lands in areas where use would be expected to increase: Bessemer Bend Historic Site, Buffalo Creek, Grave Springs, and Camel Hump. These sites cover about 48 acres. Facilities would be provided at these sites for the public health and safety, to allow increased recreational opportunities, and to meet additional public demand for day use, group camping, snowmobiling, ORV use, and overnight camping in areas where these activities are not provided or are prohibited.

These eight sites cumulatively will probably serve the recreation demand only in the short term (five years). After that, we expect a gradual deterioration of the sites from overuse.

Visual resource management classes have to be established for the PRRA. Class II areas (207,000 acres, or 15% of the PRRA) would be managed particularly for the protection of the high quality scenic resources. These classifications do not prevent land uses but may increase the cost of mitigation associated with development.

The 200-acre Poison Spider Bentonite Pit would be designated an open ORV area. Because the area is unreclaimed, with no seeding and no grading, and contains steep banks, bare slopes, and piles of earth, no significant environmental impacts would be expected. The site has become a trash dump and an unauthorized shooting area. ORV management would meet public demand and change an eyesore into a productive recreation use area.

Segments of the Oregon-Mormon Trail and the Bozeman Trail would be closed to ORV use for the protection of significant cultural values. A total of 2,615 acres in the PRRA would be closed to ORV use under this alternative, including the 630-acre portion of the Muddy Mountain EEA.

Environmental Consequences

ORV designations would provide for 1,331,676 acres of limited use, of which 64,838 acres would be confined to roads and trails designated by BLM. A total of 2,615 acres would be closed to ORV use. The "limited" designation would be monitored and supervised on a very limited basis. Some signing of the area designations would continue on an annual maintenance level. ORV designations should not have a significant effect on land uses other than those previously noted.

Hunting and fishing are expected to increase. The increases in small game hunting and in fishing would be significant. This in turn would create demands for more access onto the public lands. Recreation use on adjacent private land would increase, with inevitable conflict.

Socioeconomic Effects

Information obtained from the Wyoming State-wide Comprehensive Outdoor Recreation Plan (Wyoming Recreation Commission n.d.) indicates that although the current municipal park acreage is adequate, there are shortages in most other recreation facilities. Large growth in regional population is expected to make these shortages even more severe by 1990.

It is projected that coal development would cause a 27% increase in the population of Natrona and Converse counties. Projected oil and gas development are expected to result in another 2% of growth. The projected growth would reduce the quality of prime recreation areas.

The recreation management program would provide for adequate emphasis on management and maintenance at four sites. When supported by monitoring, use supervision, and enforcement, the program would sustain recreation opportunities in the PRRA for the next five years; however, in the subsequent five years it would gradually fall behind the increasing public demand for improved quantity and quality of recreation.

Hunting and fishing use will continue to be a significant contributor to the economy in the PRRA.

Short-term Use versus Long-term Productivity

Intensive management on four sites for recreation would preclude most other land uses.

Artifact collection by the general public (pot hunters) would result in an adverse unavoidable impact on cultural resources. There is probably no mitigating action that could be initiated to avoid this.

ORV use would continue to contribute to losses of vegetation and soil and to increased sedimentation of water in localized areas.

Increased use at recreation sites would alter or decrease the recreation value of those sites and eventually result in long-term resource impacts. Present developed recreation sites would not handle the expected increase in recreation use after five years.

Site degradation would occur in the short term and increase in the long term if management and maintenance capability remained the same or decreased in relation to the expected increase in recreational use. Mitigating measures would involve increasing management and maintenance capability, monitoring, use supervision, and enforcement.

Special emphasis would be placed on inter-agency management, project implementation, and special recreation use permits. Special user groups might be approached to help with the management and maintenance of special use areas.

Unavoidable Adverse Effects

Loss of cultural resources by pothunters would be unavoidable.

ORV use would continue to have adverse impacts on soil, vegetation, and water, and the recreation quality of developed recreation sites would continue to decrease.

The quality of recreation sites would decline with increased use, and some on-site resources would be lost.

Irreversible and Irretrievable Commitment of Resources

No irreversible or irretrievable commitment of resources is anticipated in the short term. It must be pointed out that unless more emphasis is placed on managing recreation use on the public lands (especially intensive use areas), the loss of on-site resources could be irreversible and in some cases irretrievable.

Conclusion

Intensive management on four sites would be promoted and four other sites would provide facilities to enhance the public health and safety. The proposed plan would not duplicate other services or facilities provided by other agencies,

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nor would it focus on providing highly developed facilities where funding limitations may not allow development.

For the period from 1985 to 1990, overall impacts on quality of the resource and use would be insignificant. However, as use continues to increase, we expect the quality of the recreation experience on managed sites to depreciate over the ten-year period.

As gradual population increases and visitor use data indicate, it is likely that all available funding would be used to sustain resource values and afford minimum maintenance necessary to provide adequate recreational opportunities. The current budgeting outlook affords little support for planning, development, or enhancement of new recreation sites. If new areas of use concentration occurred, little could be done to accommodate increasing pressure, especially if those concentrations occurred in fragile areas or areas containing sensitive wildlife habitats.

Soil, Water, and Air Management Program

Effects on Cultural Resources

No cultural resources would be compromised by implementation of management plans in sensitive watersheds and drainages. A site-specific cultural inventory would be conducted before placement of structures.

Land use decisions directed at restricting or prohibiting surface development in sensitive areas are generally beneficial in that they tend to protect cultural resources. Most of these decisions are directed at areas containing fragile or sensitive watersheds, and these areas can contain a higher probability of occurrence of cultural resources.

Effects on Topography

The 25% slope restriction encompasses about 615,000 acres in the PRRA. The restriction is undoubtedly beneficial in constraining activity that has a high potential for causing environmental damage on slopes of more than 25%. Development in these areas can result in site-specific topographic changes. Those sites would be small, and allowing development would be evaluated case by case.

Effects on Mineral Resources

Soil and water restrictions and the associated restrictions in fragile or sensitive watersheds have a significant effect on the manner in which oil and gas resources are developed. The restrictions do not significantly decrease the amount of oil and gas resource that would be available for development, but they do restrict the accessibility to that resource and in some cases prohibit surface development. The following are sites or areas where surface development may be restricted or prohibited:

On 12,800 acres of high, moderate, and low potential oil and gas estate within $\frac{1}{4}$ mile on either side of the North Platte River.

On 2,000 acres of low potential oil and gas estate within 600 feet of the Laramie River.

Within 500 feet of perennial streams, lakes, canals and all associated riparian habitat. Potential for oil and gas in these areas ranges from low to high.

Within 500 feet of water wells, within 660 feet of springs or artesian and flowing wells, and within 200 feet of intermittent and ephemeral streams.

These restrictions would possibly affect the placement of facilities associated with oil and gas development. The restriction may require moving a proposed well location. These decisions can be waived if the effects from a well proposal can be acceptably mitigated. There has been no instance in the PRRA in which these restrictions prevented the placement of an oil well; however, there have been many instances in which the restrictions influenced the placement of a well site. The only area where the restriction could not be waived is in the $\frac{1}{4}$ -mile restriction on the North Platte River adjacent to the Trappers Route canoe trail.

The most significant of these restrictions is the 200-foot restriction on either side of intermittent and ephemeral drainages. It is likely that this restriction would cover a significant portion of the resource area if applied at face value. For this reason, the restriction has been qualified in appendix B, SWA-2. Overall, the restriction is discretionary, and it does not appear to have a significant impact upon eliminating areas from development of the oil and gas resource.

Surface development is restricted on 5,080 acres of low potential oil and gas estate in canyons and gorges in Converse and Platte

Environmental Consequences

counties and on 5,500 acres of intermediate potential along the Goshen Hole Rim in Goshen County. Because the potential for oil and gas is low in and along the canyons and gorges, this restriction would have no significant impact on the availability of oil and gas resources. The prohibition of surface development on the Goshen Hole Rim should have no significant impact on recovery of the intermediate potential oil and gas because the area protected is narrow.

Seasonal restrictions in specific areas are presented in table 4-2 in the draft RMP/EIS. These restrictions have little significance relative to the availability of the oil and gas resource; they do limit initial development to the season when development would least affect surface resources. The restriction does not apply to the maintenance of facilities once these are developed. Then it is assumed the facility has been approved and impacts have been properly mitigated.

The potential for conflict exists in the Pine Ridge and Pine Mountain areas. These areas contain existing oil and gas fields. The conflict would be adequately mitigated by allowing new development that occurs in the open season to be continued in the closed season. The only significant conflict is in the restriction on the development season, not in the availability of the oil and gas resource.

Surface disturbance would not be permitted on slopes of 25% or more unless impacts could be properly mitigated. This encompasses approximately 615,000 acres in the PRRA. Most of the acreage overlies low potential oil and gas resources since the steeper slopes usually occur in foothill and mountain areas. It is estimated that the slope restriction affects or prevents the placement of a well 2% less of the time.

Salable mineral availability is affected by the same land use decisions that constrain development of the oil and gas resource. The most significant of these is the prohibition on use of sand and gravel resources within $\frac{1}{4}$ mile of the North Platte River. This limitation is significant in that major deposits of this resource are available within the buffer, which is close to major consumptive centers and to transportation facilities. There are no estimates on the amount of sand and gravel within the buffer; however, about 12,800 acres within that buffer contain sand and gravel. At present, it appears that the demand for sand and gravel can be maintained without extracting that mineral along the river. Authorized existing operations on federal minerals within the $\frac{1}{4}$ -mile buffer would continue until the sand and gravel resource is exhausted at that site.

The North Platte River and adjacent land are valuable for recreation, wildlife, watershed and esthetic values. The value of the river resource is likely to increase in the next ten years.

Effects on Soil, Water, and Air

Watershed condition could be improved on up to 927,000 acres of sensitive drainage areas and 9,000 acres of designated fragile areas through watershed manipulation and the construction of water and silt retention and detention structures. These improvements would be realized over the long term.

Mechanical vegetation manipulation would create localized short-term impacts on the soil resource. Soil loss through wind and water erosion would increase until vegetation became reestablished. Specific areas and acreage disturbed are mostly associated with the range and forestry programs. The amounts of loss cannot be quantified.

Identification of erosive soils and fragile watersheds and the initiation of various restrictions to protect these areas is a practical approach to prevent unacceptable deterioration and erosion. The restrictions are not focused on preventing development; rather, they emphasize the use of caution in those areas during development. This has been and would continue to be beneficial toward reducing erosion and maintaining watersheds. Land use decisions that restrict surface development are not additive. They merely identify areas where there is concern about development. In many cases, restrictions overlap with wildlife restrictions, withdrawals, and recreation areas.

Effects on Land Uses

Soil and watershed decisions would restrain and at times prohibit surface development. This would constrain mineral development, rights-of-way, or land use proposals from other resource programs that involve surface development.

The Bates Hole area is a significant contributor of sediment load in the North Platte River. This area is naturally poor in terms of vegetation and soil productivity. Development of the watershed management plan in the Bates Hole and development of water retention and detention structures should help to reduce the amount of erosion and reduce silt loads into the river, improve soil productivity in some areas, and improve water quality on as much as 265,000 acres through improved livestock distribution and watershed manipulation.

Environmental Consequences

Short-Term Uses versus Long-Term Productivity

Implementation of soil and watershed management plans, if developed, should result in improved vegetative conditions. Overall range condition would be expected to improve slightly in the long term.

Development of watershed management plans could result in isolated areas of increased vegetation loss from construction of retention or detention structures. This loss would not be significant. In general, however, vegetative conditions should be improved.

Application of decisions that restrict development in the short term would not prohibit long-term development or productivity of resources.

Productivity of watersheds would be maintained in the short term and increase slightly in the long term.

Conclusion

There would be no unavoidable adverse effects and no irreversible or irretrievable commitments of resources from the soil, water, and air management program.

The proposed plan would accomplish the primary goal of protecting soil and water resources. It would promote a watershed management effort in most sensitive or fragile watersheds and provide for evaluation and possible implementation of more intensive management in those areas. It would promote intensive watershed management on the Bates Hole area, which is expected to reduce siltation in the North Platte River and increase range condition in that area.

Two restrictions have been reevaluated and have been changed as a result of public comment. These are the 25% slope restriction and the 200 foot intermittent and ephemeral stream restriction. These changes will be redefined in the South Big Horns and Platte River Oil and Gas EAs. They are constructive changes that allow for maintaining soil and water resources and easing the restriction on development.

Wildlife Management Program

Effects on Cultural Resources

The wildlife program would have a beneficial effect on cultural resources. Occupancy restrictions and prohibition of surface development in

some HMPs would likewise be beneficial in that they tend to preserve cultural resources that may be located within the HMP. Wildlife projects that would be implemented in habitat management areas would have no significant effect on cultural resources.

Effects on Mineral Resources

Oil and gas activity could be delayed for up to 45 days in elk calving areas. All elk calving areas are rated as having low potential for the occurrence of oil and gas; therefore, the development delay of 45 days is not expected to be significant.

Oil and gas development is restricted or prohibited on a total of 70,000 acres of critical elk winter range. These areas are rated as having low potential for oil and gas. Of the 70,000 acres, 66,600 are subject to a five-month seasonal restriction. Further, 3,400 acres are subject to a year-round development restriction. Critical elk ranges are rated as having low potential for the occurrence of oil and gas.

A six-month occupancy restriction in deer and antelope critical winter ranges affects the timing of oil and gas development but has no impact on availability of the resource or development other than the seasonal restriction. A total of 115,000 acres are rated high potential; 29,000 acres, moderate potential; and 124,000 acres, low potential for oil and gas occurrence. The restrictions in critical big game habitats would be waived if factors such as weather, location of the facility, amount of forage available and physical condition of big game is favorable.

Allowing no surface development on 15,764 acres in bald eagle winter roosting areas would make oil and gas recovery difficult in parts of this area. About 13,124 acres in the Jackson Canyon area is rated as having low potential for oil and gas. The probability of drilling occurring in that area is low because of steep slopes and deep canyons and because of its low potential.

The remaining 2,120 acres is on Pine Mountain. This area is classed as having high potential for the occurrence of oil and gas. Conflict between present oil development in this area and protecting bald eagle roosting areas would be likely to occur. An additional 1,920 acres classed as having low potential is eliminated from development by a special leasing condition.

The remaining critical bald eagle roosting areas are subject to a seasonal restriction. The seasonal restriction would affect the timing of development but not the availability of the oil and gas resource in those areas.

Environmental Consequences

Raptor nests are protected by seasonal buffer zones. On the basis of current uses, species involved, and natural visual and sound barriers, buffer zones may vary. An average of 283 acres per occupied nest may be protected from three to five months. A maximum of 101,300 acres could be subject to seasonal restrictions based upon the number of known nest sites; however, not all nests are used every year. Given the continued emphasis on protecting high interest species, we would expect the restriction to increase in the short and long terms. This restriction has no effect on the availability of oil and gas resources but does limit development to a specific time of year.

At present, 103 sage grouse leks have been identified in the PRRA. Occupancy is restricted within a ¼-mile radius from each lek. This excludes 12,875 acres from occupancy year-round. An additional 1¾ miles are protected around the lek during nesting and brood rearing for two and a half months on a total of 791,300 acres. These areas are available for development during the rest of the year.

The 1¾-mile buffer can be waived if development would not seriously affect the sage grouse. A determination would be made case by case. Many of the sage grouse strutting grounds and nesting areas are in areas classed as having high potential for the occurrence of oil and gas. We expect conflict to occur in the next ten years, but in most cases, if not all, these conflicts are expected to be solved through various mitigating measures.

It is likely that surface development restrictions would be applied on about 17,000 acres as a result of intense habitat management on seven of the proposed management areas. This is a significant decrease from the present situation of about 42,000 acres.

The constraint in the South Big Horns directed at protecting all raptor nests has been revised to protect only high interest species during nesting seasons as defined in WL-7, appendix B. The direct effect of this change is beneficial in that access restrictions relative to all raptor nests in that area have been significantly reduced (the estimated reduction is 80%).

Cumulatively, surface occupancy and disturbance would not be allowed on about 45,000 acres in the PRRA because of wildlife considerations. All other restrictions are seasonal, and those could be waived upon a case by case analysis.

Effects on Vegetation, Soil, and Water

Livestock manipulation should improve soil and watershed condition. Development of ponds and fences should improve livestock and wildlife distribution, thereby improving soil, watershed, and wildlife habitat.

HMP development would be focused on the most promising areas. Increases of food and cover would be accomplished on five wetlands and five streams. This proposed plan would provide the maximum opportunity for improving habitat for upland game and waterfowl at selected sites.

Beaver would be used as a tool to rehabilitate riparian zones at Bolton Creek, Stinking Creek, and in the Medicine Bow HMP area. This would cause higher water tables, reduced silt loads of the streams, increased width and vegetative cover of the riparian zone, and short-term removal of willows and cottonwoods.

Effects on Wildlife

Wildlife improvements at Table Mountain and Springer/Bump-Sullivan units have provided year-round water and increased vegetation diversity, cover, structure, and foods. Nesting and year-round populations of geese, ducks, pheasants, and rabbits have increased dramatically, as have seasonal populations of doves. Some improvement of waterfowl nesting habitat would be accomplished at three other HMP areas (Bates Creek Reservoir, Thirty-three Mile Reservoir, and Teal Marsh Reservoir). Maintenance of fencing enclosures would increase vegetation cover and height.

Planting of shelterbelt trees at the Table Mountain unit would provide additional winter cover for pheasants and rabbits and a screen for the resting geese. HMP development on two streams (Bates Creek Aquatic and Upper Laramie River) would increase the vegetation composition, structure, and diversity of riparian habitat.

As explained in the section on the grazing management program, competition between deer and livestock would be monitored in Bates Hole and elk/livestock competition would be monitored in the South Big Horns. Livestock adjustments would be made to improve browse condition if conflicts were found after four or five years of studies.

Construction of reservoirs and development of wells and springs would increase the amount of



Beaver pond

nongame and upland game species habitat as well as expanding big game habitat through the provision of water where it did not originally exist. There would be some minor loss of habitat to these small mammals in the immediate vicinity of water developments due to trampling by livestock and big game.

Modification of existing fences on antelope critical winter ranges would provide for increased mobility and survival.

Trout fisheries would be improved on Bates Creek and Upper Laramie River through placement of in-stream structures to diversify riffles and pools and by reduction of livestock grazing to increase vegetative cover, structure, and diversity, to stabilize banks, and to reduce soil in the streams. Monitoring and stocking of fish would be done in cooperation with the WGFD.

The planting and fencing of stream bank cover would improve water quality and stability of drainages and on the North and Middle forks of Buffalo Creek and the North and Middle forks of

Trout Creek. Fencing these areas would enhance improvement of riparian areas on these streams.

Nongame bird habitat would be improved through increases in vegetative cover, structure, and diversity and an increase in food where HMPs were developed. More significant improvements could be accomplished on the HMPs that have wetland and riparian habitats.

Effects on Land Uses

The wildlife management program would constrain land uses that entail occupancy and/or surface development. Those uses would be the same as those described in the mineral section.

The conversion of 80 miles of woven wire fences to barbed wire fence in winter antelope ranges would, in the opinion of many ranchers, create an unmanageable situation for sheep. Others think that the standard four-wire fence is adequate for sheep. Impacts of this action seem to vary greatly, depending upon each individual situation.

Environmental Consequences

Short-term Use versus Long-term Productivity

Wildlife decisions that constrain surface development seasonally or prohibit surface development in some areas would prove beneficial to wildlife resources.

Initiation of HMPs would provide short-term and long-term benefits for vegetation, water, and wildlife.

Stream banks would be stabilized and soil erosion would be reduced on six streams.

Fence conversions in winter antelope range might have an impact on livestock operations.

Conclusion

There would be no unavoidable adverse effects and no irreversible or irretrievable commitment of resources from the wildlife management program.

The proposed plan would result in extensive habitat development and improved riparian habitat. It would promote a significant increase in small game and would enhance big game habitat. The largest of these proposals is the Medicine Bow HMP, which would be a cooperative habitat management effort with the Rawlins District. This HMP would be directed at improving endangered species habitat. There are significant opportunities in this area to enhance riparian areas, waterfowl habitat, and big game habitat.

Current wildlife restrictions have adequately protected wildlife habitat with a minimum amount of impact to other land uses. Maintenance of the restrictions should continue the same effect. As with the restrictions in the soil, air, and water program, these figures are not additive with any other figures in a cumulative sense. They merely focus attention on areas of concern regarding surface development. In most cases wildlife restrictions overlap soil and watershed restrictions, and others.

Mineral activity is expected to increase in the South Big Horn Mountains and the Laramie Range in the next 10 years. This will increase the incidence of conflict between development and wildlife needs. The proposed plan would allow development to occur and provide adequate protection for important wildlife habitats.

Special Designations

Effects on Cultural Resources

The ACEC designation would be eliminated at the Pterodactyl Track site. Protection would be

afforded by application of land use decisions in appendix B as necessary. This would offer sufficient protection from all land uses except locatable minerals. Mining claims that would be filed and subsequently developed inside that area would have a high probability of compromising that site.

A mineral withdrawal on the Pterodactyl Track site would be beneficial in protecting this unique paleontological resource. The site would be evaluated so that the significant paleontological resources would be included in the withdrawal. At present the 400 acres proposed for withdrawal is an estimate. Removing the ACEC designation would have no significant effect.

The Salt Creek ACEC plan would be revised to accommodate an analysis and recognition of significant historic oil and gas sites, structures, and old townsites. This would be beneficial in preserving the historical resources.

The principal danger to the integrity of Bad Water Grey Hills would be to the paleontological record, which might be threatened by amateur collectors. We are unaware of this occurring. Other features are moderately large in their general aspect, so there is probably little that would be done to mar the area, even on the land under private control.

Effects on Geology

The region with the Precambrian gneiss of the Big Horn Mountains is not likely to suffer intense damage, particularly to the Precambrian rocks, because of the limited access and the limited agricultural pursuits of the region.

Effects on Mineral Resources

Locatable mineral development could occur in the Red Wall area (8,600 acres). Other surface developments would be subject to land use decisions in appendix B that exclude surface development. There would be no change in the ease with which exploration and development of oil and gas could be carried out in the Red Wall.

About 14,000 acres would be excluded from surface development. This would affect the exploration for and development of oil and gas. The entire area is rated as having low potential for oil and gas, so the effect should not be significant. Locatable mineral entry would be excluded on about 400 acres in the Pterodactyl Track site. Locatable minerals potential is considered low in this area.

Environmental Consequences

Protection of the Casper Sand Dunes area (13,560 acres) could restrict oil and gas development somewhat. Development would be allowed, but travel would be limited to existing roads and trails.

Effects on Vegetation, Soil, and Water

Forest management in Jackson Canyon would include cutting and burning of beetle-infested trees within the roosts and thinning of roost stands. The long-term effects would be increased vigor and growth of remaining trees, increased diversity of age classes, and increased survival of seedlings. Maximum survival of all age classes and maximum sustained thermal protection of the stand would be achieved in the long term.

The Muddy Mountain EEA would be opened to forest management for control of pine beetle infestation. This would be beneficial in preserving the timber resource in that area.

The use of vehicles for the development of oil and gas resources and livestock management would be restricted to existing roads and trails to the maximum extent possible. Where road construction occurs, wind erosion is likely as a result of the disturbance.

Recreational ORV travel would be restricted to designated roads and trails, so there should be little effect on the soils. Implementation of the Salt Creek drainage plan is serving to reduce soil erosion through improved reclamation techniques and to improve water quality through monitoring.

Effects on Wildlife

Cutting of beetle trees in bald eagle roost areas in Jackson Canyon would cause immediate loss of some trees that eagles use for roosting. The loss of roosting areas and the reduced thermal protection would continue for 20 to 40 years; however, this long-term reduction in thermal protection would not be considered significant.

Initiating beetle control in the Jackson Canyon ACEC could affect the bald eagle roost areas in the short term but would promote the long-term use of that area as a significant bald eagle roost. The short-term effect is not considered significant.

Through continued implementation of the management plan for the Salt Creek Hazardous Area of Critical Environmental Concern, erosion should continue to be reduced by improved reclamation techniques, and water quality should continue to improve.

Effects on Land Uses

Cutting of beetle trees in the Muddy Mountain EEA might affect the quality of the recreation site on Muddy Mountain in the short term. We would expect that quality to increase in the long term through healthier stands.

Rights-of-way would be prohibited on 14,000 acres. There is little or no development in these areas; thus, that impact would not be significant.

Surface development would not be allowed in the Red Wall, the Pterodactyl Track withdrawal, or the Jackson Canyon ACEC/HMP. This would lead to long-term enhancement of the outstanding natural, cultural, historical, and scenic qualities of those areas.

The Casper Sand Dunes area has been leased for oil and gas development. If development should occur, reclamation would be very difficult because of the hazard of wind erosion. This area covers 13,560 acres and is rated as having high potential for the occurrence of oil and gas. The area is leased for livestock grazing, and that use would continue.

Recognition of potential national natural landmarks will not significantly affect land uses. Except for moderate agricultural uses and availability for off-road vehicles, the Rainbow Hills of Arminto appears to be in little danger.

Short-Term Use versus Long-Term Productivity

Management to protect resource values in these special areas would be beneficial to all resource components. It would tend to restrict or prohibit some land uses.

The vigor and growth of trees in Jackson Canyon would improve, but there would be some loss of thermal cover for bald eagles. There would be beneficial effects from controlling the mountain pine beetle on Casper Mountain and Muddy Mountain.

Conclusions

No unavoidable adverse effects and no irreversible or irretrievable commitment of resources would be associated with the proposed management plan for special designations.

The proposed plan would remove the ACEC designation in the Red Wall and the Pterodactyl Track. There would be no significant change in the susceptibility of these areas and the other specially designated areas to be affected by locatable mineral development.

Environmental Consequences

The mineral withdrawal on the Pterodactyl Track site would adequately protect that paleontological resource. Protection of resources in the Salt Creek ACEC would not affect oil and gas development in that area.

Beetle control in the Muddy Mountain EEA and in Jackson Canyon would be beneficial toward eradication of the mountain pine beetle. Timber resources cut in Jackson Canyon would be lost.

Revising the Salt Creek ACEC plan to include historic resources should result in preserving many of the old historic sites.

The Muddy Mountain EEA will continue as a prime recreation area that receives intensive

visitor use. Resource values in that area should be adequately protected to provide for a quality recreation experience in the short term.

On the basis of the information the National Park Service has provided and on the land use decisions in the RMP, we conclude that there would be no significant impacts to the four potential national natural landmarks. The dangers to the integrity of Hell's Half Acre is excessive human visitation controlled by a private commercial operation.

Cumulatively, implementing the proposed plan would preserve the unique values associated with these special areas.



Snowmobiling on Muddy Mountain

Preferred Management Plan



CHAPTER 5

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INTRODUCTION

We have based our selection of the proposed management plan on what we believe is the best approach for addressing each issue. The proposed plan is made up of elements from Alternatives 1, 2, 3, and 4, which were presented in the draft RMP/EIS. In some cases, our selection in this final RMP/EIS is different from that identified in the draft, and in some cases we have modified the proposed plan in response to public comments.

This RMP/EIS is a management plan first and an EIS second. Early in the scoping process, guidance was set forth to provide for the establishment of resource management units (RMUs) and prescriptions. Map 22 in Volume 2 of the draft RMP/EIS locates the 14 RMUs in the PRRA. RMUs are areas with the following characteristics:

Existing land use decisions or identified issues overlap or are in conflict with each other.

Land use management actions need to be ranked in order of primary and secondary importance and managed accordingly.

Boundaries have been identified through previous land use plans or management decisions.

Special management concerns have been previously identified and will require program activity plans.

There is a need for intensive management for limited or restrictive use, or to protect unique or fragile areas, or to manage dominant and significant resource values.

Special management is needed for resource development such as oil, gas, coal, or wood products.

The proposed plan is presented here by RMU. As in the draft RMP/EIS, the planning decisions that will guide various resource programs are defined in appendix B. Resource management in the PRRA would conform to the decision defined in that appendix.

RESOURCE MANAGEMENT PRESCRIPTIONS

Introduction

The RMUs are identified as follows:

- RMU 1: South Big Horn Mountains
- RMU 2: Pine Mountain-Goldeneye Reservoir
- RMU 3: Oregon-Mormon Trail
- RMU 4: Fremont Canyon
- RMU 5: Salt Creek
- RMU 6: Casper Sand Dunes
- RMU 7: North Platte River
- RMU 8: Casper Mountain-Muddy Mountain-Jackson Canyon
- RMU 9: Bates Hole
- RMU 10: Laramie Range Foothills
- RMU 11: Ross
- RMU 12: Mule Shoe Flats-Richeau Hills
- RMU 13: Rawhide-Table Mountain-Springer/Bump-Sullivan
- RMU 14: Remaining PRRA

It should be noted that the unit prescriptions for each of the fourteen areas will focus chiefly on the resource values present and the prescription for each resource program in that unit.

RMU management prescriptions define the types of land use action that would occur in each RMU as a result of the proposed management plan. Where dominant resource values and actions are not prevalent, the prescription will focus on major or priority management actions that would be carried out to improve, sustain, or protect resources in the unit. In all cases, RMU prescriptions are guided by the decisions in appendix B.

This process affords detailed direction to specific geographic units and provides a clear picture of what resource values and BLM program actions would be initiated to manage resources over a ten-year period. It also will serve as an important budgeting tool. As priority programs and actions are characterized by unit, work force requirements and materials can be budgeted systematically to support planned actions.

Prescriptions for Each RMU

RMU 1: South Big Horns.

The South Big Horns RMU (RMU 1) contains about 381,000 acres of BLM-administered surface, 349,000 acres of state and private lands, and 404,000 acres of federal mineral estate. Dominant resource values are grazing, recreation, and wildlife. Other resource values are forest resources, oil and gas, and salable minerals such as sand and gravel, moss rock, and flagstone. Mining claims are present for bentonite, gold, and silver. There are prehistoric cultural sites in three areas.

Proposed Management Plan

Management emphasis would be on grazing (all or parts of 10 "I" category allotments and 11 "M" category allotments), forestry, recreation, and wildlife (related timber harvest, recreation facility maintenance, and maintenance of wildlife habitat); and lands and realty (obtaining access agreements and disposing of isolated unmanageable lands). Oil and gas potential in the portion of the unit west of the Red Wall and north of the Badwater and Lost Cabin-Arminto lands is low to moderate; the rest of the unit has high potential for oil and gas. Fire suppression zones are required to direct suppression priorities.

Cultural Resources

Cultural resource inventories would be conducted on all federal surface and split-estate parcels before any surface-disturbing activities could begin. Mitigation would be directed toward eliminating or reducing adverse impacts to potentially significant cultural resources. The Rock Cairn Trail and site 48NA940 would be protected. The Notches Dome Archeologic District would be protected, but exploration and development of the oil and gas resource would be allowed.

Energy and Minerals

We would continue to issue sales and free use permits in environmentally acceptable areas for mineral material, moss rock, and sand and gravel as required by public demand. Mining claim staking, exploration, and development are at a low level of intensity.

Surface development would be prohibited within ½ mile of either side of the Red Wall.

Development would be permitted throughout the rest of the RMU, subject to decisions that protect wildlife, soil, water, and cultural resources. These are identified in appendix B.

Fire Management

Fire management actions are defined in table B-1 in appendix B. Priority full suppression zones are proposed for forestry and recreation (4,800 acres), wildlife (5,800 acres), and oil and gas fields (6,400 acres). Urban/rural interface buffer zones and adjoining private land values would require 3,800 acres of scattered BLM parcels to be managed for full fire suppression.

The proposed limited suppression zone would encompass more than half the South Big Horns RMU—approximately 300,000 acres. Buffer zones

¼ mile wide would be established between areas of priority suppression and limited suppression. Full suppression actions would be taken in these areas, as currently directed. These areas cover approximately 52,500 acres.

Additional fire suppression constraints would be incorporated with the existing critical elk winter range, and any pertinent cultural protection standards would be included in the normal fire year plan and the operational plan for priority full suppression.

As part of the limited suppression planning and implementation, owners of intermingled parcels of land within limited suppression zones would be contacted for their approval of incorporating private lands of similar low value, low risk into the limited suppression plan. Twelve cooperative agreements would be needed.

Prescribed burning would be implemented on about 7,500 acres after 14 burn plans were completed on 11 grazing allotments and one stock driveway. Fire prescriptions could be initiated to enhance forestry and wildlife values in the Badwater, Upper Forks of Buffalo Creek, and Taylor Slope areas. Fire prescriptions in these areas would be initiated as dictated by field intensive study.

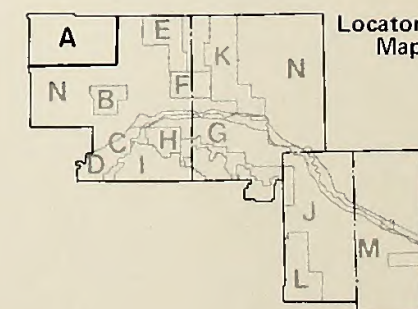
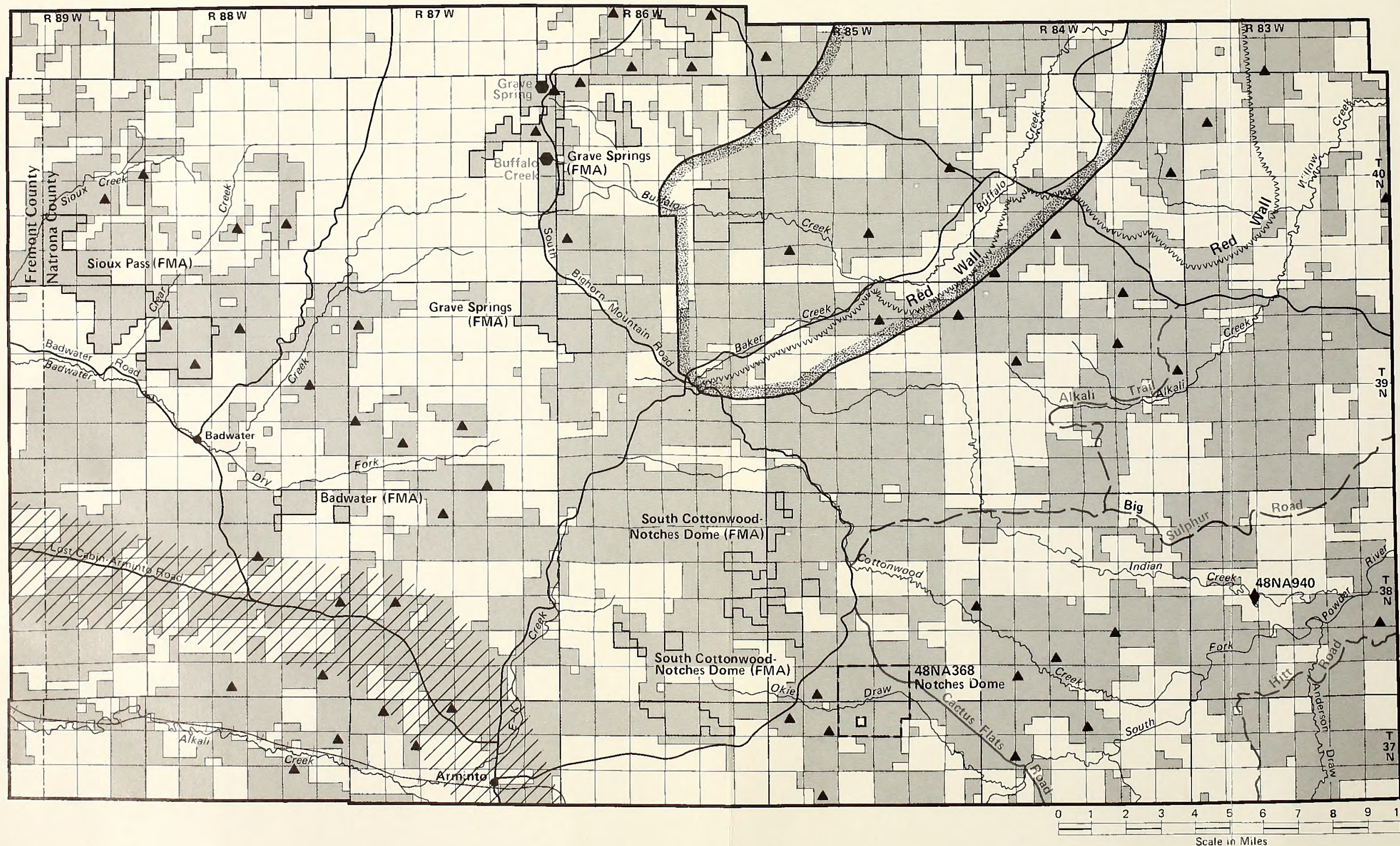
Forest Management

About 500 mbf per year would be harvested on about 100 acres in the Grave Springs area for approximately three or four years between 1990 and 1995. We would undertake the first stage of a two-stage shelterwood cut and plan for 10 to 15 clearcuts of 3 to 5 acres each. When the stand was stocked (600 trees per acre), and trees had grown to pole size, we would undertake the second stage—to perform thinnings at ten-year intervals for the seedling-sapling stage and at twenty-year intervals for the pole stage.

In the South Cottonwood/Notches Dome area and the Badwater area, we would collect field data.

In the Badwater area, we would conduct a forest reconnaissance on the area, collect data, and determine the resource potential.

In the Sioux Pass area, we would conduct a forest reconnaissance, collect data, and determine the resource potential. If sufficient resources should be present, we would write a plan of action for sales.



- | | | | |
|--|--------------------------|----------------------------------|------------------------------------|
| Federal Surface (381,000 acres) | Prescribed Burn Sites | Forest Management Area (FMA) | Range/Wildlife Big Game Study Area |
| Private Surface (349,000 acres) | Campgrounds | Archeological District | Existing Easement |
| Federal Mineral Estate (404,000 acres) | Corridor (Rights-of-Way) | Cultural Site- S.O. AR-WY-06-171 | Proposed Easement |

Map A South Bighorns Resource Management Unit

Proposed Management Plan

Grazing Management

Management of allotments is shown on table B-2, and developments and the type of supervision are defined in table B-3, both in appendix B.

RMU 1 contains all or parts of 10 "I" category allotments and 11 "M" category allotments. Livestock use in two "I" category allotments, the Buffalo Creek Ranch (Aetna Insurance Company)

and Willow Creek Company, would be monitored more intensively for livestock and deer-elk grazing conflicts. After the first five years, either these studies would be dropped because no conflict was found or we would initiate action to settle the conflict. We would expand monitoring in the area to the Coffman Ranch Company and the Cloud Creek Sheep Company as necessary.



Deer and livestock sometimes compete for forage.

Lands

Approximately 2,520 acres have been identified for disposal in this RMU. These lands would be disposed of only by exchange or to meet important public purpose needs. Exchanges would be considered primarily to acquire private lands in critical elk range and to enhance recreation opportunities.

A corridor is designated along the Lost Cabin-Arminto Road for placement of major rights-of-

way. The area lying north and west of the Badwater, Lost Cabin-Arminto, and Buffalo Creek roads and the Red Wall is closed to placement of rights-of-way. An exception will be made if oil and gas leases in this area achieve production. At that time, rights-of-way will be allowed only in accordance with an approved oil field development plan. Rights-of-way needed to transport products out of the area must parallel county roads except for the Big Horn Mountains, Okie Trail, and Buffalo Creek county roads.

Proposed Management Plan

Acquisition of access easements would be pursued on the Alkali Trail, Hitt, and Big Sulphur roads to enhance recreation opportunities and use of public lands.

Recreation Management

We would continue to manage principally for extensive and dispersed recreation use with minimal regulatory constraint.

ORV use would be limited to existing roads and vehicle routes on all public lands in the RMU except for the Red Wall area, where ORVs could be used only on designated roads and vehicle routes on 32,295 acres. The Red Wall area would be signed accordingly.

Buffalo Creek and Grave Springs campgrounds would continue to be managed and maintained for camping with only minimum support facilities such as vault latrines, improved access roads, trash cans, picnic tables, and designated campsites at each campground.

Soil, Water, and Air

We would study the following sensitive drainages to determine the need for implementation of watershed management plans: Anderson Draw, Okie Draw, Indian Creek, Buffalo Creek, and Badwater Creek. Further study also would be carried out for a fragile watershed area in Mikes

Draw, T37N, R85W.

On the basis of cost-benefit analysis, the management plans could prescribe watershed manipulation in the form of seeding, livestock manipulation, construction of water spreaders, and construction of water detention and retention structures.

Intermediate and long-term stream monitoring would continue in the following drainages: Badwater Creek, Sioux Creek, Alkali Creek, Clear Creek, and Dry Fork of Badwater Creek.

Wildlife

Monitoring of elk winter use areas and of competition for forage between elk and livestock would be initiated. Elk calving areas would be identified and protected. We would fence the south end of Pete Holman's allotment, initiate monitoring of deer-livestock competition, and monitor raptor nesting and sage grouse strutting. We also would install guzzlers, develop springs and seeps for chukar, deer, and sage grouse, conduct ferret searches on prairie dog towns, and monitor fisheries pressure. We would coordinate with WGFD if stocking or stream improvement should be needed, initiate brush treatment as necessary, and fence the wetlands portions of reservoirs. Improvements would be maintained as needed.



Buffalo Creek

Proposed Management Plan

RMU 2: Pine Mountain-Goldeneye Reservoir

Pine Mountain-Goldeneye Reservoir (RMU 2) contains 26,000 acres of BLM-administered land and 66,000 acres of state and private lands; there are 71,000 acres in federal mineral estate. The dominant resource values are wildlife, with critical habitat for a rare and endangered species (bald eagle roosting, perching, and feeding areas) on Pine Mountain and waterfowl and fisheries populations at Goldeneye; oil and gas potential; and recreation particularly at Goldeneye Reservoir. Other resource values are cultural resources and forest resources. Fire management actions are required to protect sensitive resources and important structures.

Cultural Resources

Cultural resources would be subject to low intensity management except for necessary inventories to mitigate surface-disturbing activities.

Energy and Minerals

We would continue to monitor mining claims. Most of these are for bentonite; some claims are for thorium, rare earths, and gold. We would issue free use permits for sand and gravel, if those materials were available, for state and county highways. Moss rock and flagstone material sales would continue on public demand.

The oil and gas potential on and around Pine Mountain is considered to be high. There is a small field on top of the mountain with marginal productivity. Numerous dry holes have been drilled recently on and around the mountain. A deep test of the sub-thrust frontier formulation at the top of Pine Mountain is being drilled to meet West Pine Mine Mountain Deep Unit obligations.

Management would continue to focus on protection of sensitive resources and monitoring of impacts on bald eagle roost areas when feasible. Oil and gas potential in the vicinity of Goldeneye wildlife and recreation area is high, but little interest has been expressed to date. No development would be allowed inside that area.

Fire Management

Priority full suppression zones would include those for recreation, 700 acres; wildlife, 1,000 acres; oil and gas, 4,250 acres. Urban/rural interface near the towns of Powder River and Natrona and other adjoining private land values would require full suppression on 2,500 acres of scattered

BLM parcels.

A limited suppression zone would be designated that would encompass an area of low value resources. This zone would comprise less than half the Pine Mountain-Goldeneye RMU, or approximately 12,000 acres. Private landowners within the limited suppression zone would be contacted for their approval of incorporation of lands of similar low value into the limited suppression plan. Six cooperative agreements would be needed.

Buffer zones ¼ mile wide would be established between areas of priority suppression and limited suppression. Suppression actions taken in these areas would be full suppression, as now. Approximately 8,000 acres would retain existing fire suppression method constraints in bald eagle roost areas.

Prescribed burning would be implemented on 550 acres after three burn plans and EAs were completed on three grazing allotments.

Forest Management

Forest management would center principally on collection of field data for Pine Mountain. If an adequate resource is present, the harvest would take place on demand. If the resource should be found unsuitable for harvest, the area would be eliminated from forest management consideration.

Grazing Management

RMU 2 contains all or part of five "I" category allotments and five "M" category allotments. The Goldeneye allotment (Brewer) would be monitored closely because of the recreational use of Goldeneye Reservoir.

Lands

Approximately 720 acres have been identified for disposal. Disposal would be implemented only by exchange or to meet public purpose needs.

One corridor is designated along U.S. Highway 20/26 to accommodate major rights-of-way. Site-specific routing adjustments will be made to avoid conflicts with public use and recreation facilities at Goldeneye Reservoir. Easements have been acquired for pedestrian access around the reservoir. These easements provide public access to the entire shoreline for fishing and other forms of recreation.

Proposed Management Plan

Recreation Management

Generally, this unit would be managed as an extensive recreation management area where dispersed recreation would be encouraged and where visitors have freedom of recreation choice with minimal regulatory constraint. Goldeneye Reservoir area was designated a special recreation management area, and the Goldeneye Wildlife and Recreation Area Management Plan was completed and implemented on March 17, 1978. The plan provides detailed planning with specific

objectives use by visitors and for resource protection while recreational opportunities are provided consistent with public demand. The plan would be amended to include an overnight camping area.

Support facilities to be provided are 1 vault latrine, 1 parking area, 1 boat ramp, 3 trash cans, 1 picnic ramada, 6 picnic tables, and 6 campsites.

ORV travel in the area is limited to the designated access road only.



Goldeneye Wildlife and Recreation Management Area

Wildlife

The Pine Mountain bald eagle area would be included in the Jackson Canyon AMP/ACEC. Oil and gas exploration and development activities would be monitored in relation to sensitive species habitat and effect.

Studies for waterfowl nesting and productivity would be initiated for Goldeneye Reservoir. We would coordinate placement of pedestrian trails

and other facilities with the landowner involved and WGFD. Additional coordination and assistance would be provided to the WGFD for enhancement of a quality fishery and improvement of general wildlife habitat in the area.

Overall monitoring of critical antelope winter range would be initiated. Spring and reservoir development for wildlife has been identified on the Cummings and Irvine Brothers allotments.

RMU 3: Oregon-Mormon Trail

The Oregon-Mormon Trail RMU (RMU 3) is a linear unit that encompasses lands on either side of the Oregon-Mormon trail, generally $\frac{1}{2}$ mile on either side. Therefore, acreages have not been compiled. No finite boundary has been drawn along the border of the trail on the unit map. The dominant resource values of RMU 3 are historic resources and recreation resources. Of the 29 miles of trail corridors that cross BLM surface, $2\frac{1}{4}$ miles are potentially eligible for the National Register. Other resources along the corridors are minerals. That unit also contains wildlife habitat for bald eagles, sage grouse, and raptor nesting areas.

Management in this unit would be directed primarily toward protection of the character of significant remnants of historic trail segments. Interpretation and ORV use would be managed for enhancement of the cultural resources.

Cultural Resources

The following trail segments would be protected from surface development and ORV use: Fort Laramie segments A, B, and old Bedlam; the Ryan/Prospect Hill segment; the Horse Creek segment; Emigrant Gap; Bessemer Bend; Platte Island; Sergeant Custard; and Glade Draw. Legal descriptions of these areas are in the "Cultural Resources" section of appendix B.



Rock Avenue - Landmark along the
Oregon-Mormon Trail east of Willow Springs

As indicated in the forthcoming Oregon-Mormon Pioneer National Historic Trail RAMP, the Fort Laramie A and B, Ryan/Prospect Hill, Sergeant Custard, Old Bedlam, Glade Draw, and Platte Island segments of the trail would be nominated to the National Register of Historic Places. Additional trail segments that may be located would be protected on the basis of an evaluation of their significance.

Before development of federal minerals could begin, cultural resource inventory would be conducted on federal surface according to standard procedures. Existing policy on cultural resource inventory would be followed with regard to development of federal minerals under private surface.

Energy and Minerals

There are extensive mining claims in the area. Mineral development in Western Natrona County along the trail would be monitored to avoid destruction of any important segments.

The potential for oil and gas along most of the length of the Oregon Trail is considered high. Development is occurring now in the vicinity of Willow Springs. Portions of the Oregon Trail that are known to contain significant cultural resources have been leased for oil and gas, but no surface development is allowed, so that site integrity is protected on the trail segments.

Fire Management

Suppression methods under current management would be retained. Locations of the trail system would be plotted so that they could be incorporated into the normal fire year plan.

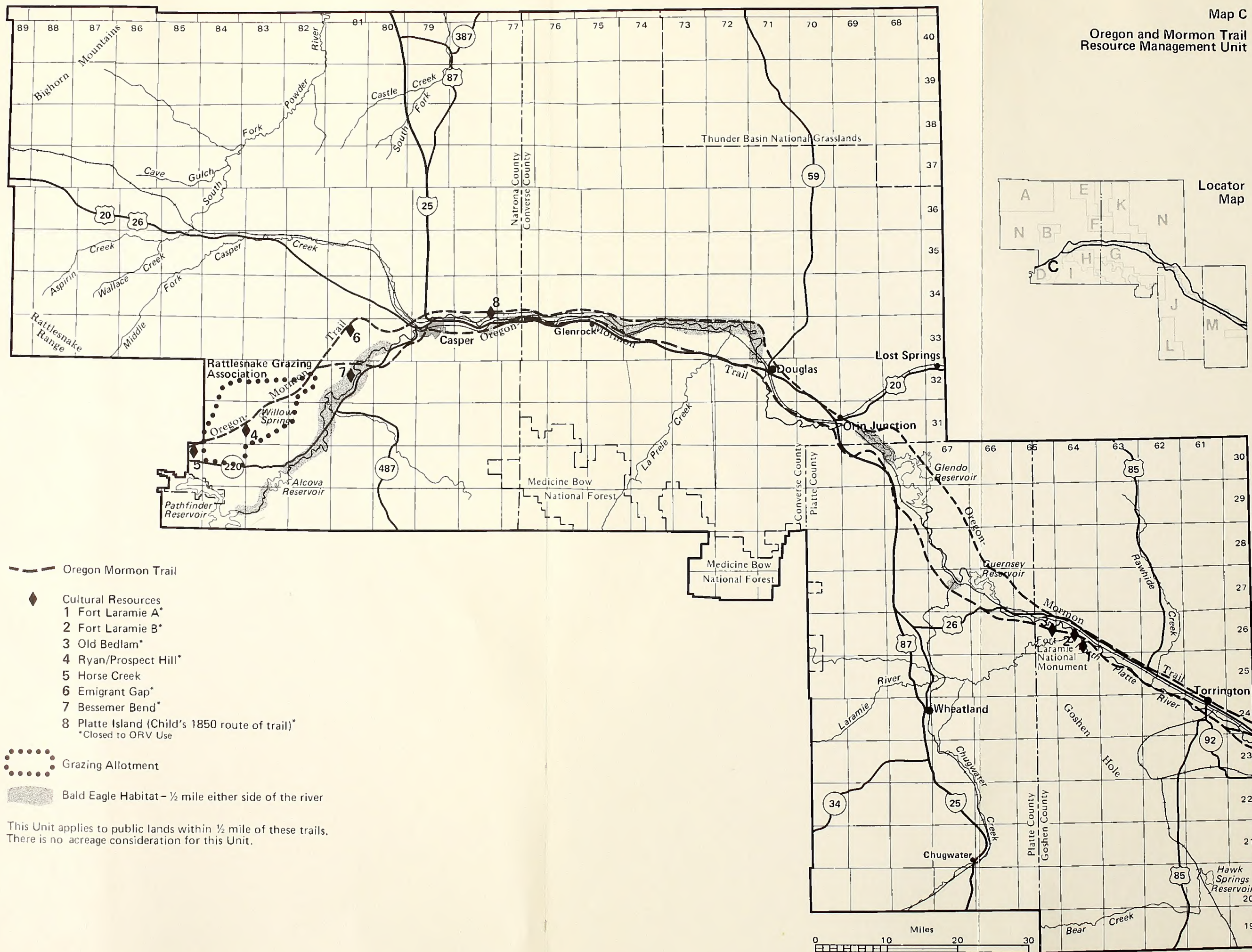
Some areas along the Oregon Trail from Casper to the west edge of the resource area would be in a limited suppression zone. The rest of the trail would be retained in full suppression according to standard procedure. No priority would be placed on cultural resources except that they would be protected from adverse suppression actions.

Surface-disturbing suppression actions such as use of heavy equipment for blading vegetation or fireline construction would be prohibited on the three segments described earlier. Indiscriminate ORV travel also would be prohibited.

Any cooperative agreement with other federal, state, or county firefighting agencies would stipulate the cultural resource concerns in their respective areas.

Map C
Oregon and Mormon Trail
Resource Management Unit

Locator Map



— Oregon Mormon Trail

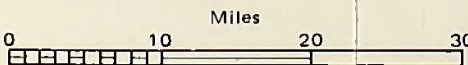
- ◆ Cultural Resources
 - 1 Fort Laramie A*
 - 2 Fort Laramie B*
 - 3 Old Bedlam*
 - 4 Ryan/Prospect Hill*
 - 5 Horse Creek
 - 6 Emigrant Gap*
 - 7 Bessemer Bend*
 - 8 Platte Island (Child's 1850 route of trail)*

*Closed to ORV Use

●●●●● Grazing Allotment

■ Bald Eagle Habitat — ½ mile either side of the river

This Unit applies to public lands within ½ mile of these trails.
There is no acreage consideration for this Unit.



Proposed Management Plan

Grazing Management

The Oregon Trail runs through one "I" category allotment and two "M" category allotments. The primary allotment that would be affected by actions to protect the Oregon Trail is the Rattlesnake Grazing Association.

Lands

No land disposal actions will be considered on the important trail segments identified. Exchanges will be pursued to acquire private land containing rut segments at Ryan Hill and Alkali Slough.

A portion of the Oregon Trail corridor designation parallels the Oregon Trail between Oil Mountain and Emigrant Ridge.

Recreation Management

The purpose of establishment of national historic trails is the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. The potential for public outdoor recreation or historical interest is based on interpretation and appreciation of the trail's history. Site-specific decisions related to the management of the recreational and historical resources of the Oregon-Mormon Trail in the PRRA will be provided by the statewide Oregon-Mormon Pioneer National Historic Trail RAMP, which is to be completed by 1985.

We would continue to administer special recreation use permits for travel on the trail case by case, coordinating such permission with involved landowners. All segments (955 acres) of the trail would be closed to ORV use yearlong to protect cultural resource values.

Overall recreation management will emphasize monitoring, use supervision, and enforcement to resolve conflicts between users and landowners. Recreation services would be limited to interpretive brochures, maps, signs, support facilities, and maintenance. No significant facility development is planned.

Wildlife

An HMP would be written for bald eagle areas along the trail. This would be addressed in the Jackson Canyon ACEC/HMP. We also would monitor use areas and identify any recreation use conflicts. The need for monitoring sage grouse strutting grounds and raptor nesting habitat is critical, particularly along the Oregon-Mormon trail route in western Natrona County.

RMU 4: Fremont Canyon

The Fremont Canyon RMU (RMU 4) comprises 12,000 acres of BLM-administered land, 12,000 acres of state and private lands, and 22,000 acres of federally administered mineral estate. The dominant resource values are prehistoric fossils (Pterodactyl Track area), recreation, and raptor habitat.

The focus of attention for this unit centers on the canyon area itself. Lands surrounding this unique area contain important values for other resources such as minerals, soil, and watershed.

Cultural Resources

The intensity of cultural resource management would be low. Inventories and mitigation of surface-disturbing activities would be initiated according to the nature of proposed actions.

Energy and Minerals

We would monitor mining claims in the general area and review plans for mining if claims should be proposed for development. We would continue to issue moss rock sales where permissible and consider aggregate removal beyond ¼ mile from the river, where such removal would not conflict with the canyon or the pterodactyl track area.

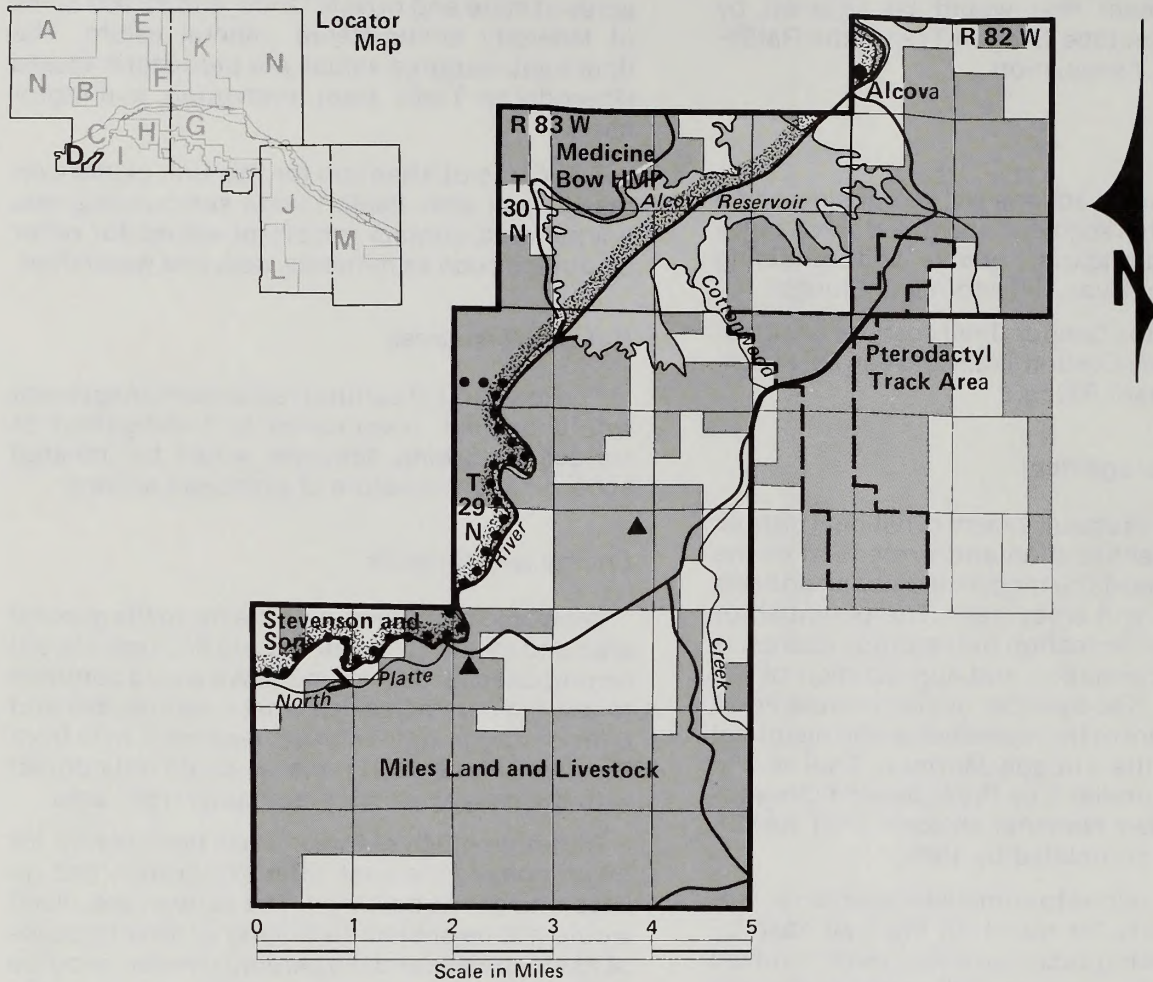
Although much of the unit has been leased for oil and gas in the past, little exploration and no development has occurred. The canyon area itself would not be subject to drilling activity because of its steep walls and the perennial water resource at the bottom, which is protected by a ¼-mile buffer. Seasonal restrictions are applied for protection of bald eagle habitat.

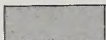
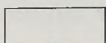
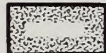
Fire Management

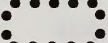
Because of priority full suppression zones for recreation, wildlife, and urban/rural interface buffer zones around the town of Alcova, as well as other adjoining private land values, approximately 500 acres of BLM-managed land would be under priority full suppression.

A limited suppression zone would be initiated. It would encompass less than half the Fremont Canyon RMU, approximately 9,400 acres.

Buffer zones ¼ mile wide would be established between areas of priority suppression and limited suppression. Suppression actions taken in these areas would be full suppression, as now, on approximately 1,780 acres.



-  Federal Surface (21,000 acres)
-  Private Surface (3,000 acres)
- Federal Mineral Estate (22,000 acres)
-  Habitat Management Plan (HMP)

-  Prescribed Burn Sites
-  Cultural Resources
-  Grazing Allotment
-  Fremont Canyon

Map D Fremont Canyon Resource Management Unit

Proposed Management Plan



Fremont Canyon

As part of the limited suppression planning and implementation, owners of intermingled parcels of private land within limited suppression zones would be contacted for their approval of incorporation of private lands of similar low value and low risk into the limited suppression plan. Three cooperative agreements would be needed. Prescribed burning would be implemented on 300 acres after a burn plan and EA were completed on the Miles Land and Livestock allotment.

Grazing Management

This area contains two "I" category allotments, Miles Land and Livestock and Stevenson and Sons.

Lands

All the public land in this RMU would be retained and managed because of the importance of multiple resources and because there are no isolated or fragmented parcels.

The existing C&MU Act classification on Fremont

Canyon would be terminated, opening this area to operations under the mining laws. A new withdrawal from the operation under the mining laws will be recommended for the pterodactyl track site. Before the site is withdrawn, the actual fossil area will be redefined. Preliminary investigation indicates that the fossil area may be about 400 acres. No surface development would be allowed in the pterodactyl track area unless it is directed at site interpretation.

Recreation Management

Public land in this unit would be managed as an extensive recreation management area where dispersed recreation would be encouraged and where visitors would have freedom of recreational choice with minimal regulatory constraint except for ORV use. ORVs would be confined to existing roads and vehicle routes.

Soil, Water, and Air

No surface development would be permitted within $\frac{1}{4}$ mile of the North Platte River within Fremont Canyon.

Proposed Management Plan

Wildlife

The area would be managed for protection of bald eagle habitat and potential peregrine falcon habitat, golden eagle nesting areas, prairie falcon nesting areas, and sage grouse strutting grounds.

A joint HMP between the PRRA and the neighboring Medicine Bow resource area is planned to direct management and project needs for part of the unit. The Medicine Bow HMP boundary is the North Platte River. The HMP area is west of the river.

Project locations and design would be planned, if needed, for fencing of select riparian areas and for development of springs.

RMU 5: Salt Creek.

The Salt Creek RMU (RMU 5) comprises 91,000 acres of BLM-administered surface and 104,000 acres of state and private lands. Another 9,520 acres fall within Naval Petroleum Reserve No. 3. There are 205,920 acres of federal mineral estate. The dominant resource values are oil and gas and historic resources. Other important resource values are grazing and soil and water resources.

Management would focus on mineral development, special management attention for the Salt Creek ACEC, fire management planning, protection of cultural resources in connection with historic significance of oil field development, and continued lands and realty support work in connection with R&PPs, energy, and non-energy related rights-of-way.

Cultural Resources

The primary cultural resource activities would be inventory and evaluation of potentially significant historic oil and gas sites in the unit. Because of the intensive oil field development and production, close coordination with field operators would be needed relative to any nomination of historic sites and any interpretive or protective actions for those sites.

We would inventory and evaluate the following historic oil and gas sites for National Register eligibility by 1987: Salt Creek, Shannon, Eclipse Camp, Hanly and Bird Camp, Northwestern Camp, IBA Camp, Franco Camp, South Camp, North Camp, Lavaic, Teapot, and Snyder. If warranted by inventory, we would establish Salt Creek Oil Field as a Historic District, and it would be nominated to the National Register of Historic Places. Continued use of the field for oil and gas

development would be a priority. Interpretive signs and facilities would be developed as appropriate, with the cooperation of oil and gas operators.

Cultural resources inventory would be conducted on all federal surface in accordance with existing policy.

Energy and Minerals

Mining claims exist in 24 sections. The potential for bentonite exploration and mining is confined to the southwest portion of the unit. Few or no sales of sand and gravel or moss rock are anticipated.

Intensive oil and gas development and production has occurred in this area since the 1890s. Drilling and production will continue. A major part of the management direction for this area would be continued emphasis on implementation of the Salt Creek ACEC plan.

Special field studies are in progress to determine effective means of reclamation and rehabilitation of disturbed areas. These studies would continue, with annual reports being prepared. Projects would be monitored so that rehabilitation practices can be improved.

Fire Management

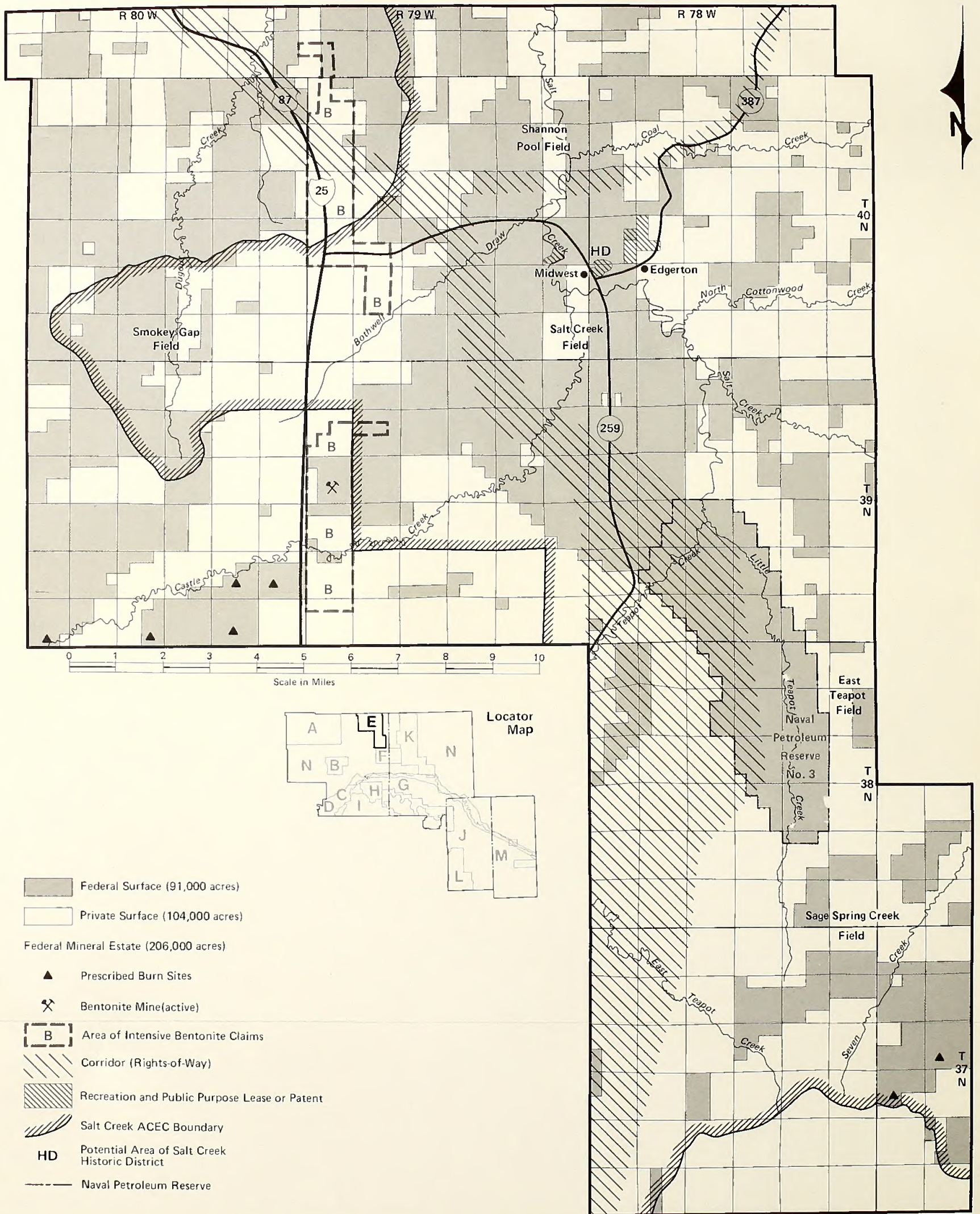
Four priority full suppression zones would incorporate both oil and gas resources and urban/rural interfaces around Midwest and Edgerton. Approximately 23,000 acres of BLM surface would be in the priority full suppression zone.

Four limited suppression zones would be established on 33,120 acres of low value, low risk BLM surface. The remaining 34,500 acres of public land in the RMU would be managed for full suppression according to current procedures. Cooperative agreements with 11 owners of adjacent land would be pursued for inclusion of intermingled lands into the limited suppression plan.

Prescribed burning would be implemented on about 350 acres on "I" category range allotments.

Grazing Management

This area contains all or parts of three "I" category allotments and 11 "M" category allotments. Grazing management actions within the Salt Creek ACEC generally would complement the Salt Creek ACEC Management Plan.



Lands

Five existing R&PP areas provide community services and recreation opportunities for Midwest and Edgerton. As additional needs are identified, BLM leases will be considered to accommodate community needs. Title transfers will not be considered since the area immediately surrounding the towns is designated as an ACEC. Approximately 800 acres have been identified for disposal by exchange or for public purpose needs. The identified land is within the ACEC.

The withdrawal on Naval Petroleum Reserve No. 3 was reviewed in 1982 and continued for 100 years. The area is closed to operation of the public land laws, including the mining and mineral leasing laws. The Secretary of the Navy has jurisdiction over these lands and the Department of Energy administers them. Oil and gas are being developed under a private contract.

Corridors are designated for major right-of-way placement along Wyoming Highway 258/U.S. 87 and Wyoming Highway 387. Site-specific routing adjustments will be made to avoid direct impacts on the towns of Midwest and Edgerton and to minimize conflicts with oil and gas development in the Salt Creek and adjacent oil fields. No rights-of-way will be allowed along the newly constructed segment of I-25 in Ts. 37, 38, and 39 N., Rs. 79 and 80 W., or in the towns of Midwest or Edgerton, except for roads and other facilities serving the towns or supporting oil and gas development.

Recreation Management

The area would be managed as an extensive recreation area where visitors would have freedom of recreational choice with minimal regulatory constraint. Recreation management would emphasize monitoring, use supervision, and enforcement to resolve user conflicts and provide resource protection as necessary. ORVs would be limited to existing roads and vehicle routes.

Soil, Water, and Air

The BLM would actively participate in the implementation of the Salt Creek ACEC Management Plan. Equal emphasis would be placed on the implementation of decisions on priority oil fields identified in the plan. The priority fields are East Teapot, South Salt Creek, Salt Creek, Smokey Gap, Shannon Pool, Sage Spring Creek, and Sherwood Unit.

Portions of the following sensitive drainages are within the Salt Creek RMU: Castle Creek, Salt Creek, and Teapot Creek. These drainages, outside the oil fields, would be studied further to determine the need for additional protective measures or for the development and implementation of watershed management plans. On the basis of cost-benefit analysis, the management plans could prescribe watershed manipulation in the form of seedings, livestock manipulation, construction of water spreaders, or construction of water detention and retention structures.

Intermediate and long-term stream monitoring would continue on Salt Creek and Castle Creek. National Pollutant Discharge Elimination System monitoring would continue on point discharges associated with oil fields.

Wildlife

We would monitor raptor nesting and mitigate adverse effects through seasonal or locational stipulations for oil and gas actions where necessary.

Studies would be made of deer and antelope water needs and browse conditions as part of grazing management monitoring. We would determine fencing needs for wetlands and reservoirs. Black-footed ferret searches would be conducted in prairie dog towns threatened by development.

RMU 6: Casper Sand Dunes.

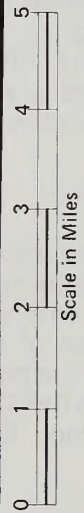
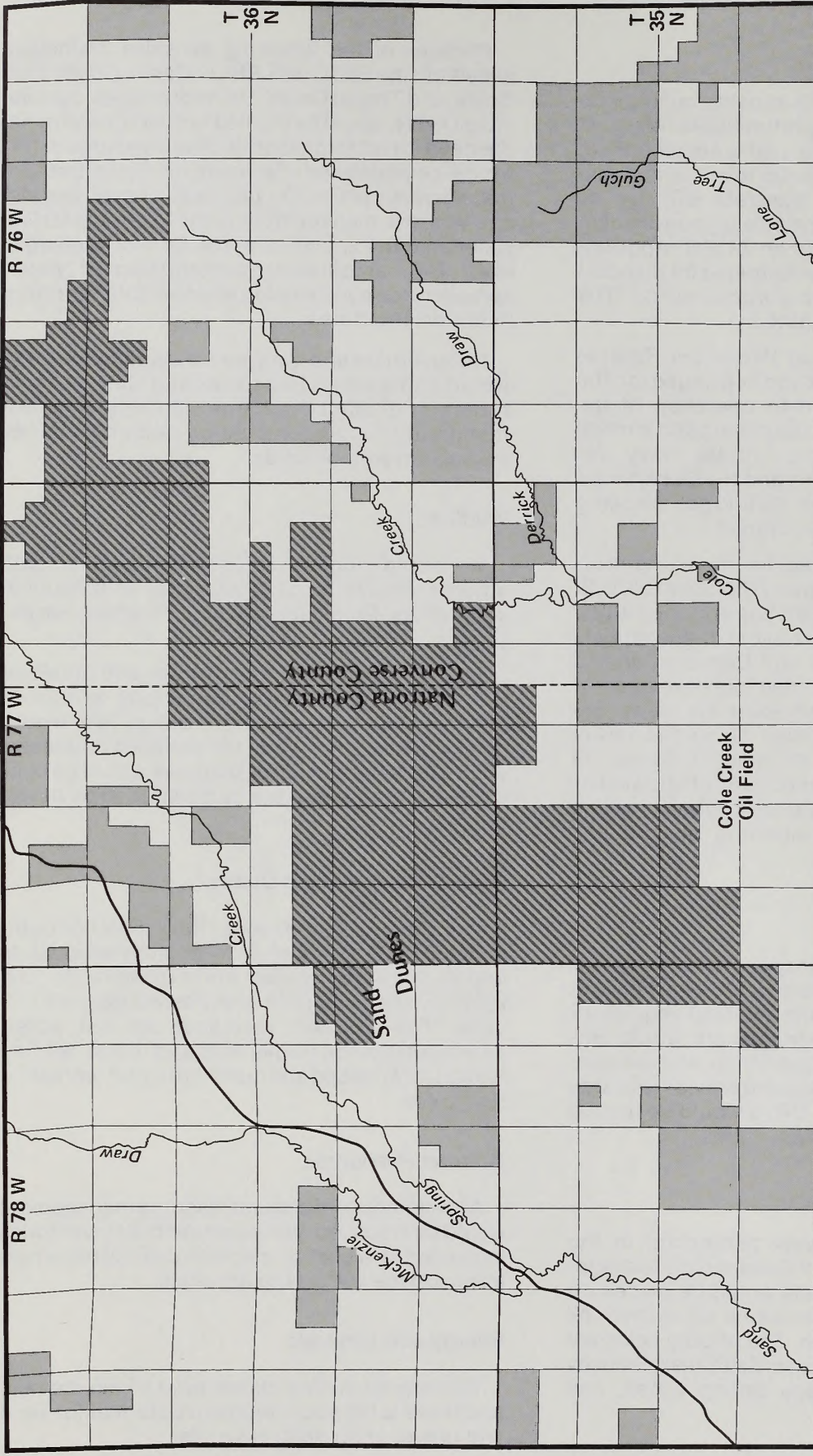
The Casper Sand Dunes RMU (RMU 6) comprises 30,000 acres of BLM-administered lands and 47,000 acres of state and private lands. The federally administered mineral estate totals 75,000 acres. The dominant resources are soil, water, and vegetation on fragile soils and dunes, wildlife habitat for antelope and deer herds, and recreation resources.

Cultural Resources

A low intensity of cultural resource management would be practiced. We would conduct inventories as needed to mitigate impacts on cultural resources from surface-disturbing activities.

Energy and Minerals

Virtually no mining claims exist within the unit, and there is little development potential for sand and gravel or for solid minerals.



- Federal Surface (30,000 acres)
- Private Surface (47,000 acres)
- Federal Mineral Estate (75,000 acres)

Vehicle use is limited to designated roads and vehicle routes on public land



Map F Casper Sand Dunes Resource Management Unit

Proposed Management Plan

The southern portion of the unit was developed for oil and gas in the 1930s and 1940s in the Cole Creek field. Some exploration has occurred since then; however, there has been little new development and production.

Fire Management

Priority suppression zones would include 300 acres near the Cole Creek oil field. Three limited suppression zones would cover 23,920 acres. Cooperative agreements with six owners of adjacent land would be pursued for inclusion of adjoining intermingled ownership lands into the limited suppression plan.

Approximately 5,600 acres of scattered BLM parcels would be included in the full suppression buffer zone. Prescribed burning would be considered if practical to improve overall range conditions where there are heavy concentrations of undesirable plants such as sagebrush.

Grazing Management

This area contains all or part of five "M" category allotments. Restrictions of ORVs and other surface development would complement livestock grazing. Grazing leases would be maintained at present use levels.

Lands

Approximately 1,040 acres have been identified for disposal, none of which are in the active dune area. These lands would be disposed of only by exchange or for public purpose needs.

Recreation Management

Recreation management would be supportive of watershed management. This unit would be managed as an extensive recreation management area where dispersed recreation would be encouraged in locations where soil and watershed values permit.



Active sand dunes cover existing vehicle routes

ORV designations would limit travel to designated roads and vehicle routes on public land except during the fall hunting season, when travel would be permitted on existing roads and vehicle routes. This designation would involve 13,560 acres of public land.

There is no legal public access; access is obtained through landowner permission only. We

would pursue access only through a cooperative landowner agreement should public demand be evident.

Recreation management and maintenance would be minimal, with emphasis on monitoring, use supervision, and enforcement to resolve user conflicts and provide resource protection.

Soil, Water, and Air

This RMU would be managed to protect the sensitive and fragile area.

Wildlife

As part of the soil and watershed plan, we would initiate studies of wetlands to determine water needs for wildlife and livestock. We would initiate a wildlife inventory to determine species and diversity in this habitat. The inventory is needed because this type of habitat is rare in the PRRA.

Prairie dog towns would be monitored for ferrets and burrowing owls as necessary.

RMU 7: North Platte River

The North Platte River RMU (RMU 7) is a linear unit comprising 4,600 acres of BLM-administered land. The dominant resources for management are wildlife and recreation. Other important values in the unit are oil and gas and the potential along the river for salable minerals.

Management in this unit would focus on a wildlife HMP for bald eagles along the North Platte River and for riparian habitat in the Rawhide area. A RAMP would be prepared for a special recreation management area along the river. Included in the plan would be seven canoe trail sites west of Casper and ten parcels fronting the river east of Casper. We would pursue acquisition of land west of Casper through exchange. Part of the unit would continue to be withdrawn from locatable minerals activity.

Cultural Resources

Low intensity management would be practiced for cultural resources. We would conduct inventories and mitigate adverse effects on cultural resources where needed.

Energy and Minerals

We would continue to protect public lands for ¼ mile on each side of the North Platte River consistent with the high recreation and wildlife values provided by the river and adjacent riparian areas.

Oil and gas potential is considered to be high along most of the river's length in the PRRA. A small oil field is operational west of Casper in the vicinity of Washout Creek. The Big Muddy Oil

field between Casper and Glenrock is in a tertiary recovery phase.

Most of the area along the North Platte River has been leased for oil and gas activity.

No sand and gravel operations on federal minerals would be allowed in the ¼-mile buffer zone. Currently authorized sand and gravel operations on federal minerals within the ¼-mile buffer on the North Platte River would be allowed to continue.

Fire Management

Priority full suppression would be practiced on seven Trappers Route landings and at Bessemer Bend. These special recreation management areas along the river between Alcova and Casper cover about 200 acres. Ten other existing sites that have no facilities would continue to be included in the adjacent full suppression zone.

Grazing Management

Three "I" category allotments border the North Platte River. There are no proposals at this time that would restrict livestock grazing. Grazing would continue to be managed as it is now.

Lands

No lands have been identified for disposal except for the ten riverfront parcels east of Casper. These lands would be leased or patented only under the R&PP Act with special emphasis on management to protect the resource values along the river. Exchanges would be pursued to acquire private land along the river west of Casper to improve management and promote access to recreation resources.

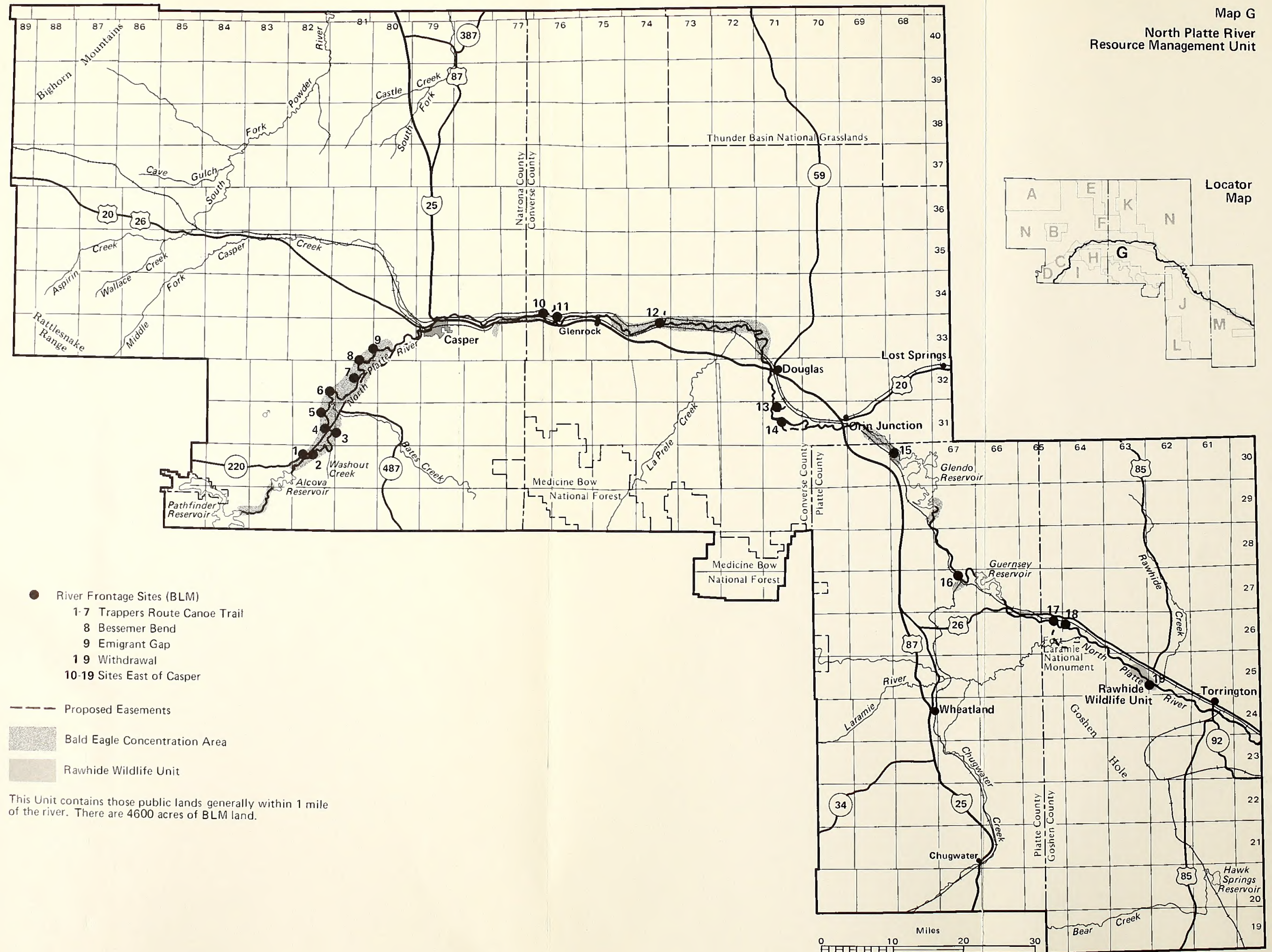
The existing withdrawal from mineral operations would be continued to protect 3,264.21 acres of river frontage. This acreage includes the seven trappers Route Landings, Emigrant Gap, and Bessemer Mountain.

The corridor along the river would be phased out as existing rights-of-way are retired and removed. No future rights-of-way will be allowed in this corridor.

We will pursue acquisition of access to eight of the riverfront parcels east of Casper. Two of the ten parcels are accessible from county roads; however, physical access to the Wendover Site is constrained by existing developments and land uses. Current efforts by the Wyoming Game and

Map G
North Platte River
Resource Management Unit

Locator Map





North Platte River

Fish Department to secure public access points along the river may eliminate the need for the BLM to acquire easements to all eight parcels.

Recreation Management

Approximately 4,600 acres of public land would be intensively managed as a special recreation management area. We would develop prescriptions for management by characterizing recreation opportunities in terms of setting and type of activity. Areas included in the intensive management would be seven Trappers Route Canoe Trail sites, Bessemer Bend Historic Site, Emigrant Gap between Alcova and Casper, and ten riverfront parcels of public land between Casper and the Wyoming-Nebraska state line.

ORV use is limited to designated roads and vehicle routes for 2,990 acres of public land between Alcova and Casper. All roads will be designated for ORV use.

Facility development would be limited to support facilities for recreational activities, visitor safety, and resource protection. Improvements planned

are upgraded access roads, designated parking and camping areas, picnic tables, trash cans, vault latrines, informational signs, loading/landing sites, and boundary markers.

Cooperative agreements with private landowners would be sought to provide for BLM management of land during the peak recreation season only. One site identified is the private land between Bessemer Bend bridge and Bessemer Bend Historic Site.

Soil, Water, and Air

No surface development would be permitted on BLM-administered surface within $\frac{1}{4}$ mile of the North Platte River. The restriction would not apply to recreation facilities.

Wildlife

Wildlife management would focus on development of a bald eagle HMP and monitoring use and feeding areas along the river. Raptor nesting areas would be monitored.

RMU 8: Casper Mountain-Muddy Mountain-Jackson Canyon.

RMU 8 encompasses 31,000 acres of BLM-administered land, 70,000 acres of state and private land, and 70,000 acres of federal mineral estate.

This area has a full range of high value resources with various management needs. The principal values are wildlife, forestry, recreation, lands and realty, and grazing.

Wildlife management actions would protect significant bald eagle and golden eagle roosts and implement beetle control on trees in and around eagle roosting areas. Critical winter elk range also would be protected.

We would manage for vegetation species diversity in concert with forestry objectives. An active forestry management program would be carried out for this unit with a planned harvest of about 750 mbf per year for about five years to combat pine beetles.

Recreational facilities include intensively used campgrounds and an environmental education area. The demand for year-round recreation is increasing among local and out-of-state users. There are 13 existing R&PP areas, disposal potential for high value land on 520 acres, and access easement needs. There is potential for exchanges to increase the environmental education area and critical elk winter range.

The Casper Mountain Steering Committee is working with the Natrona County Planning Commission to prepare a land use plan for private land on Casper Mountain. That plan, when completed, would be coordinated with the BLM's resource management plan.

Cultural Resources

The intensity of management for cultural resources would be low, with the principal actions tied to inventory and mitigation, if required.

Energy and Minerals

One flagstone pit (Mosteller) is available and would continue to operate. Mineral activities would be considered case by case in concert with recreation and wildlife plans and decisions.

No surface development would be permitted in the Jackson Canyon portion of this unit for the protection of bald eagle winter habitat and roosting areas.

No surface development would be permitted in the Muddy Mountain EEA and its associated forest management area so that the unit's integrity as an environmental education area can be maintained. The restriction would not apply to forest or recreation management practices.

The eastern portion of this unit contains critical elk winter range, city and county parks, and R&PP grants that have been leased for oil and gas subject to a "no surface occupancy" restriction.

In portions of the RMU that have been leased with surface development permitted, such surface development is allowed only from June 1 to November 30. These areas are subject to the decisions that constrain development listed under "Soils, Water, and Air", "Wildlife", and "Recreation" in appendix B.

Fire Management

Fire management would have a high priority on Casper Mountain because of the numerous homesites, important recreation and wildlife resources, and high fire risk. We would pursue cooperative agreements with private landowners and other fire and land management agencies so that limited suppression and priority full suppression areas can be established.

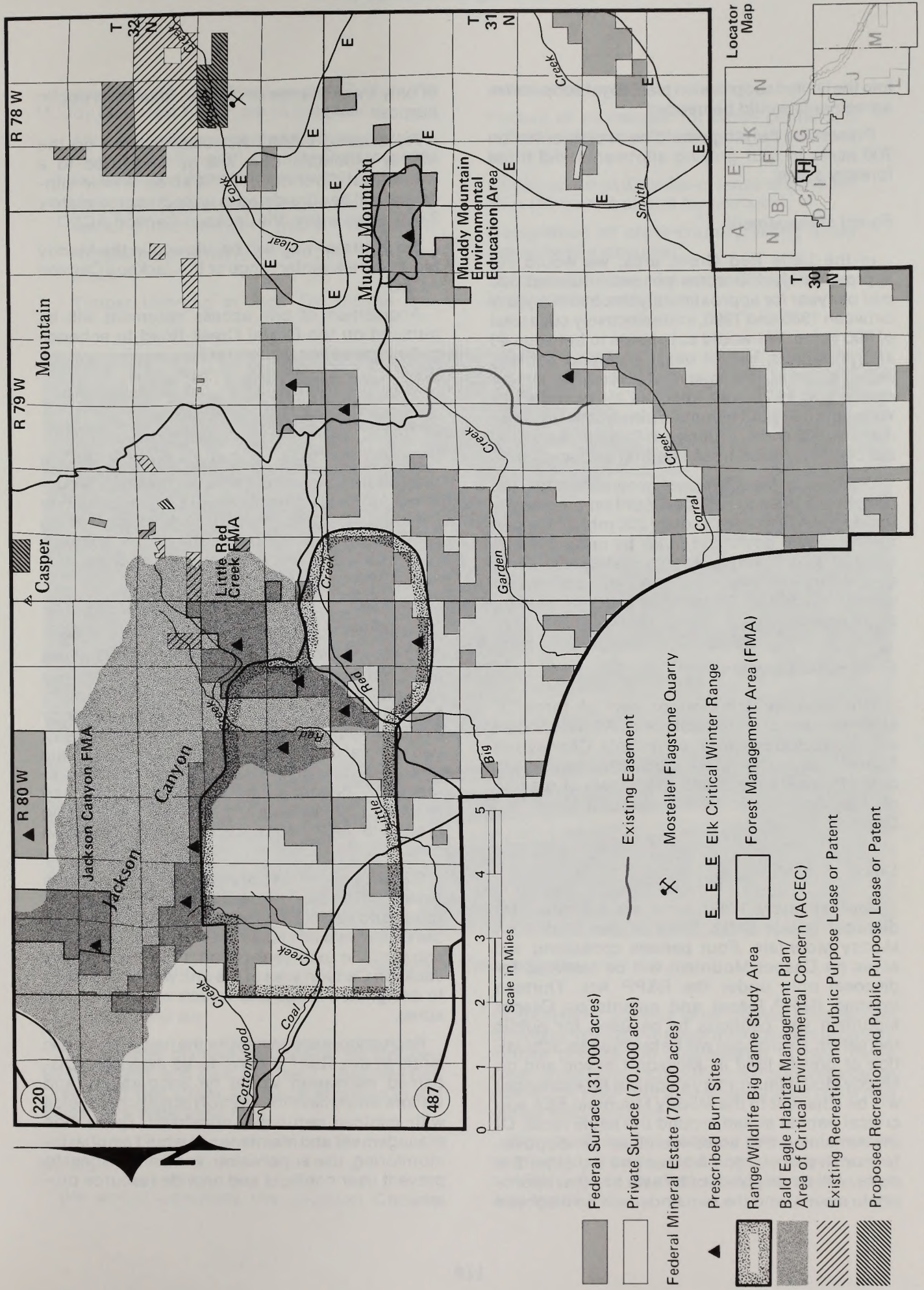
Priority full suppression zones would be established for forestry, 3,800 acres; wildlife, 2,160 acres; and recreation, 1,200 acres. The urban-rural interface near the city of Casper and other adjoining private land values would require 1,200 acres of scattered BLM parcels to be managed for priority fire suppression.

A limited suppression zone would encompass about 12,000 acres in the Casper Mountain-Muddy Mountain RMU.

Buffer zones ¼ mile wide would be established between areas of priority suppression and limited suppression. Full suppression actions would be taken in these areas, which would cover approximately 1,200 acres.

We would incorporate additional fire suppression constraints to protect existing critical elk winter range, bald eagle roost areas, and cultural resources. These constraints would become part of the normal fire year plan and the operational plan for priority full suppression.

As part of the limited suppression planning and implementation, owners of intermingled parcels of land within limited suppression zones would be contacted for their approval of incorporation of private lands of similar low value and low risk



Map H Casper, Muddy Mountain, and Jackson Canyon Resource Management Unit

into the limited suppression plan. Eight cooperative agreements would be needed.

Prescribed burning would be implemented on 700 acres in four grazing allotments and three forestry areas.

Forest Management

In the Little Red Creek area, we would cut approximately 100 acres per year, harvest 500 mbf per year for approximately three to five years between 1985 and 1990, and selectively cut a total of 800 acres. We would cut stands to between 40 and 60 square feet of basal area and perform thinnings at ten-year intervals for seedling-sapling stands and at 20-year intervals for pole stands. We would carry out mountain pine beetle management on 800 acres. In Jackson Canyon, we would cut beetle-infested trees and thin as necessary.

On Muddy Mountain, we would manage the forest resources to reduce mountain pine beetle incidence. We would produce 200 mbf per year in fuelwood and posts and poles by cutting beetle trees and by thinning approximately 400 acres over a three to five year period. In addition, we would thin about 75 acres of seedling-sapling stage stands.

Grazing Management

This area contains all or part of three "I" allotments and four "M" allotments. We will conduct special studies on two "I" allotments, Cheney and Schmitt, to determine livestock-deer conflicts in critical winter ranges and the effects of grazing on water quality in Red Creek and Little Red Creek.

Lands

Approximately 1,300 acres are identified for disposal in this RMU. None of this land is on Muddy Mountain. Four parcels containing 490 acres on Casper Mountain will be reserved for disposal only under the R&PP Act. Thirteen existing R&PP leases and patents on Casper Mountain will continue to be used for public recreation. Exchanges will be pursued for acquisition of private land in Jackson Canyon and on Muddy Mountain. Primary emphasis for exchanges will be adjacent to the Muddy Mountain EEA and critical habitat in and around the eagle roost. Of the remaining 810 acres identified for disposal, two small parcels, one 5 acres and the other 2 1/2 acres, will be disposed of by sale or other appropriate means, and the remainder will be disposed

of only by exchange or to meet important public purpose needs.

An existing C&MU Act classification on the Muddy Mountain EEA will be converted to a withdrawal covering 1,175.94 acres. A new withdrawal will be considered to protect approximately 3,500 acres within the Jackson Canyon ACEC.

No rights-of-way will be allowed in the Muddy Mountain elk winter range or the Jackson Canyon ACEC.

Acquisition of one access easement will be pursued on the Corral Creek Road to enhance public recreation opportunities.

Recreation

Muddy Mountain was designated a special recreation management area, and a Muddy Mountain RAMP was completed and implemented on May 10, 1977. The plan provides detailed planning with specific objectives for use by visitors, resource protection, and recreational opportunities consistent with public demand.

Recreation use on the 12,000 acres of public land in this RMU would be intensively managed.

The Muddy Mountain EEA (1,200 acres) contains a 675-acre natural area. Existing facilities are two designated campgrounds, Lodgepole and Rim; two nature trails, Beaver Trail and Forest Ecology Trail; one interpretive ramada; two water wells; two vault latrines; one access road; several picnic tables, and two trailhead parking areas. Improvements to be added are 15 miles of marked snowmobile trails, a day use area, a group camping area, one vault latrine, picnic tables, and trash cans.

ORV travel on Muddy Mountain Recreation Area (11,370 acres) would be limited to designated roads and vehicle routes. A total of 630 acres of the EEA would be closed to ORV travel (including snowmobile use) year-round. ORV travel in the Jackson Canyon area of the unit would be limited to designated roads and vehicle routes on 3,890 acres.

Recreation management for the remaining public lands in this RMU is considered extensive. Dispersed recreation would be encouraged, and visitors would have freedom of recreational choice with minimal regulatory constraint. Recreation management and maintenance would emphasize monitoring, use supervision, and enforcement to prevent user conflicts and provide resource protection.

Proposed Management Plan

Projects to be completed as specified in the Muddy Mountain RAMP are as follows:

Acquisition of easements for 3 miles of roads, ½ mile for walking, 2½ miles for cross-country ski trails, and 6 miles for snowmobile trails.

Hiring of a seasonal ranger each summer and fall for enforcement and public information.

Rehabilitation of old roads and other disturbed areas.

Timber thinning in high fire danger and

overstocked areas.

Pursuit of exchanges for lands containing critical winter range for elk and lands adjacent to the EEA.

Construction of 8½ miles of fence around the EEA (40 inch, 4-strand barbed wire).

Designation of cross-country skiing areas (snowmobile closures).

Continuation of the post and pole sale program in designated area.



Campsite on Muddy Mountain

Soil, Water, and Air

No intensive management would be required for soil, water, and air in this RMU. The Little Red Creek and Red Creek would be included in the Bates Hole Watershed Plan.

Wildlife

We would complete the Jackson Canyon

ACEC/HMP, control pine beetle infestations through a more active forest management program, initiate priority full suppression in bald eagle roost areas, and incorporate fire suppression as part of the HMP. We also would install signs and define road closures.

We would monitor deer and elk use of areas in relation to browse conditions to identify any conflicts. Such studies would be coordinated with the WGFD.

RMU 9: Bates Hole.

The Bates Hole RMU (RMU 9) comprises 109,000 acres of BLM-administered land, 133,000 acres of state and public lands, and 216,000 acres of federal mineral estate. The principal resource values are grazing, wildlife, soils, and watershed. Other values are found in minerals and recreation. Resource management would focus on a well-coordinated approach among grazing, wildlife, and soils and watershed so that proper rangeland management would be addressed holistically.

This RMU contains nine "I" allotments and nine "M" allotments. Proper use and condition of vegetation to support livestock, antelope and deer, and related watershed concerns would be analyzed. Wildlife management would focus on aspects of wildlife for Bates Creek and Kerfoot Creek, Bolton Creek, and Stinking Creek.

The Bates Hole watershed management plan would focus on sensitive watershed concerns. We would continue gathering data at existing stream monitoring stations. Fire suppression zones would be established. Prescribed burning plans would be developed as a tool for grazing management on ten allotments.

Cultural Resources

Management of cultural resources in this unit would be at a relatively low level of intensity with activity tied to inventory and mitigation if needed. Proposed actions would be reviewed for impacts on cultural resources, and cultural inventories would be conducted when necessary.

Energy and Minerals

Energy and mineral management intensity would be relatively low for this unit. There are mining claims on 130 sections for uranium, bentonite, and silica sand. There are no large active mining operations in the RMU, although some large uranium mines operate in Carbon County, to the south. Moss rock and flagstone are present in small amounts, but demand for material of this type is low. Gravel exists in the area, but demand is low. Two free-use permits have been issued to the Wyoming Highway Department.

Locatable and salable minerals would not require any special management actions. Sales and permits would be handled case by case.

Potential for oil and gas development in this unit ranges from moderate to high. This unit contains several old fields.

Development on this unit is subject to a seasonal restriction from December 30 to June 1 for the protection of critical winter range for antelope and deer. The restriction also protects sensitive watersheds during the time when they are most susceptible to erosion. The unit is also subject to other decisions that constrain surface development, as described in appendix B.

Fire Management

Fire management is a critical support program in this RMU. Priority full suppression zones would be delineated for protection of existing facilities for oil and gas on 700 acres. Adjoining private land values would require management of 6,400 acres of scattered BLM parcels for full fire suppression. A limited suppression zone encompassing approximately 100,000 acres of BLM-administered surface would be recommended. Buffer zones ¼ mile wide would be established between areas of priority suppression and limited suppression. Full suppression would be practiced in these areas (approximately 1,800 acres).

As part of the limited suppression planning and implementation, owners of intermingled parcels of land within limited suppression zones would be contacted for their approval of incorporation of private lands of similar low value into the limited suppression plan. This would involve 17 cooperative agreements.

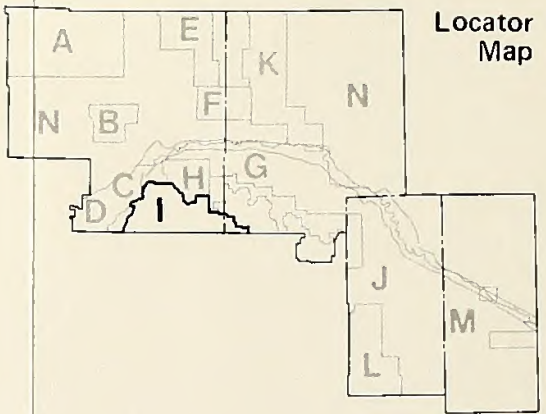
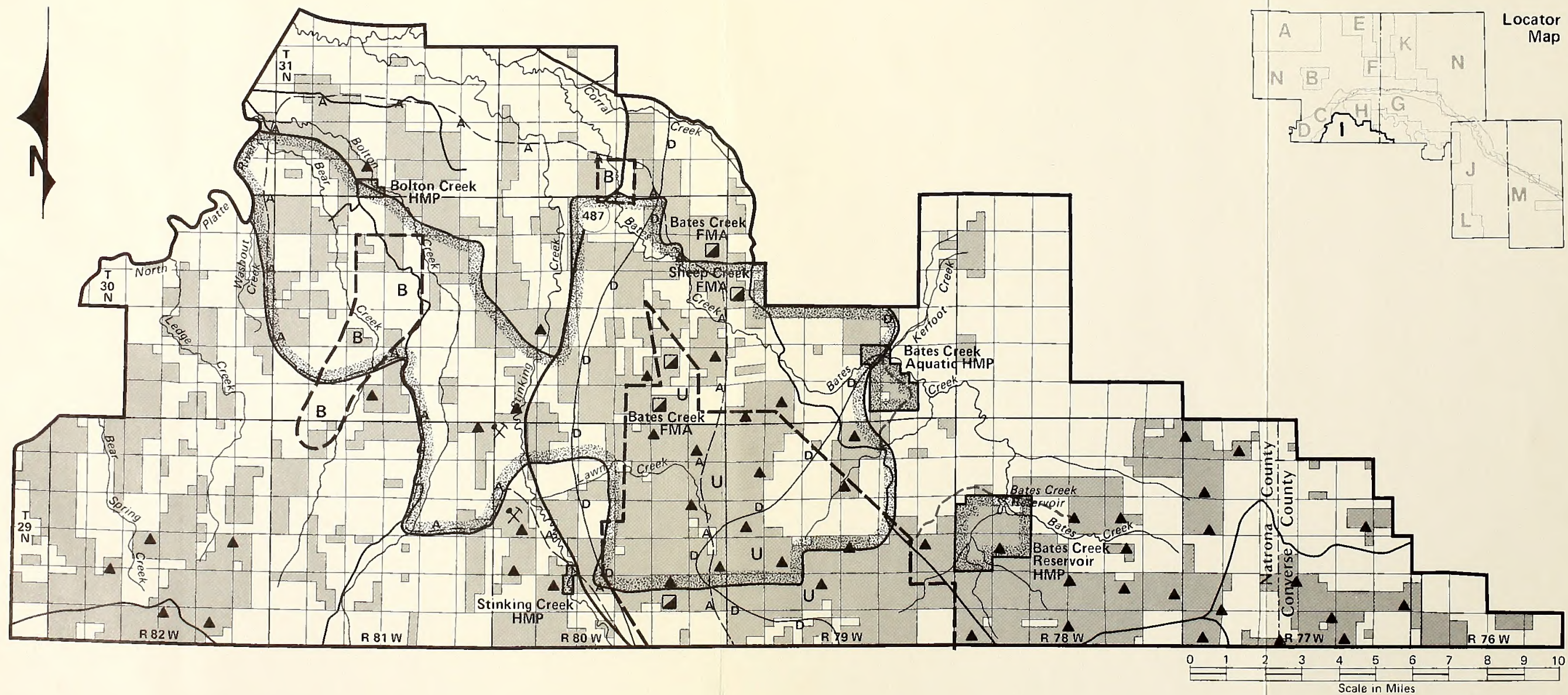
In addition to the 1,600 acres proposed for prescribed burning under current planning, prescribed burning on approximately 7,000 acres would be implemented on ten grazing allotments and one stock driveway.

Forest Management

This unit contains scattered ponderosa pine or mixed ponderosa pine and juniper. It is tentatively classified as nonproductive forestland. Little or no forest management action is planned. Bates Creek and Sheep Creek areas would be reviewed for fuelwood potential.

Grazing Management

The unit contains nine "I" and nine "M" category allotments. Grazing management would focus on conflicts between livestock and antelope or deer in critical winter ranges. Water quality would be studied intensively. Allotments affected in the first five years would be Bentley, Garrett Ranch, Marton Brothers, Miles Land and Livestock, and Steinle. After the first five years, the studies would



- | | | | |
|--|-------------------------------------|---|-------------------------------|
| Federal Surface (109,000 acres) | Prescribed Burn Site | Area of Extensive Bentonite Mining Claims | Forest Management Areas (FMA) |
| Private Surface (133,000 acres) | Free Use Permit for Sand and Gravel | Area of Extensive Uranium Mining Claims | |
| Federal Mineral Estate (216,000 acres) | Antelope Critical Winter Range | Proposed Easement | |
| Range/Wildlife Big Game Study Area | Deer Critical Winter Range | Habitat Management Plan (HMP) | |

Map I Bates Hole Resource Management Unit

Proposed Management Plan



Mosaic vegetative pattern resulting from prescribed fire

be dropped if no conflict was evident, or they would expanded to include both Body ranches, Bates Creek Cattle Company, Schnoor, Cheney, Martin-Haygood, and Milne.

Lands

Approximately 2,040 acres of public lands have been identified for disposal in this RMU. This land would be disposed of only by exchange or for public purpose needs, except for two parcels totaling 120 acres. These parcels are included in a pending application under the Desert Land Entry Act. The application was filed before the RMP was initiated. It will be considered on its own merits and will not be denied on the basis of this planning decision.

Acquisition of two easements will be pursued for public access to the Bates Creek Reservoir and to Kerfoot Creek. The Kerfoot Creek easement would be for foot traffic only so that the area would be available for public use but the resources along the creek (including wetland/riparian values) would not be jeopardized.

Recreation Management

No major recreation actions are planned in this unit. It would be managed as an extensive recreation management area where dispersed recreation would be encouraged and where visitors would have freedom of recreational choice with minimal regulatory constraint. ORV use would be limited to existing roads and vehicle routes on all public lands. Recreation management would emphasize monitoring, use supervision, and enforcement to

resolve user conflicts and provide resource protection.

Soil, Water, and Air

The Bates Hole Management Plan will be developed on the basis of data obtained through a special study.

This RMU contains the following sensitive drainages: Washout Creek, Ledge Creek, Bear Creek, Bolton Creek, Stinking Creek, Upper Bates Creek, Red Creek, Little Red Creek, and Corral Creek.

On the basis of cost-benefit analysis, the management plan could prescribe watershed manipulation, livestock manipulation, and construction of water spreaders and detention and retention structures.

Intermediate and long-term stream monitoring would continue on Bates Creek, Stinking Creek, Lawn Creek, Upper Bates Creek, Corral Creek, Bolton Creek, Ledge Creek, Washout Creek, Bear Creek, Red Creek, and Little Red Creek.

Wildlife

Management actions for wildlife are closely related to grazing and watershed concerns. In this unit, we would focus on habitat management planning and subsequent on-the-ground actions supportive of other resource program objectives. The following HMP planning and action would be required within the unit.

For Bates Creek Reservoir HMP, we would

pursue acquisition of an easement of 3 miles, conduct prescribed burns of sagebrush, and monitor sage grouse strutting and winter use. We also would construct islands and monitor waterfowl use. For the Bates Creek Aquatic HMP, we would fence portions of the stream to exclude livestock, obtain a walk-in easement ($\frac{1}{4}$ mile), and establish a primitive parking area and fence it to restrict vehicle traffic. We would also monitor fishing pressure and cooperate with Wyoming Game and Fish Department for stocking fish or stream improvement.

For the Bolton Creek Aquatic HMP, we would construct an exclosure fence for monitoring purposes and monitor wildlife use. For the Stinking Creek Aquatic HMP, we would construct an exclosure fence for monitoring purposes. The WGFD manages wildlife populations (including beaver), and the BLM manages wildlife habitat on BLM-administered public lands in cooperation with WGFD. Management of beaver populations to raise the water table is proposed for the Bolton Creek Aquatic HMP, and transplantation and management of beaver populations is proposed for the Stinking Creek Aquatic HMP.

Throughout the unit, springs and seeps would be developed where needed to support wildlife, and fencing would be done according to specifications in critical antelope areas and riparian areas.

RMU 10: Laramie Range Foothills.

The Laramie Range Foothills RMU (RMU 10) comprises 15,000 acres of BLM-administered land, 206,000 acres of state and private land, and 107,000 acres of federal mineral estate. The primary resource values are forestry, recreation, and wildlife.

Fire management and soil and water would provide important support to other programs. Forest management would involve management planning and harvest from important timber areas. There is good potential for additional hunting and fishing opportunities in the unit if access easement or cooperative agreement could be negotiated on any of five areas (Deer Creek, Wagonhound Gorge, LaPrele Creek, School Section Mountain, and Cottonwood Creek). Wildlife management would be limited because of surface ownership, but there is potential for limited management of elk and deer ranges and fisheries through cooperative agreements with landowners, the Wyoming Game and Fish Department, and the Forest Service. All program actions in this unit would emphasize

coordination with the Forest Service where adjacent land ownership and cooperative use objectives are present.

Cultural Resources

Management of cultural resources would be at a low level of intensity. The potential for prehistoric sites is moderate to high, and there is moderate potential for historic sites such as stagecoach routes, trails, and homesites.

We would apply survey requirements and stipulations before approving projects to ensure identification of prehistoric and historic resources. These sites would be evaluated for significance under National Register criteria (36 CFR 60.4), and potential impacts would be assessed according to criteria of effects (36 CFR 800.3). Mitigation would be conducted as necessary.

Energy and Minerals

There is a potential for gravel extraction along Cottonwood Creek and Sand Draw. Limestone for construction aggregate could possibly be developed in the next ten years. Development for gravel and limestone would be permitted case by case if its acceptability was indicated by environmental assessment.

Most of this unit is considered to have moderate potential for oil and gas development. Some of the lower elevation areas have high potential. Leasing in this area occurred for the first time in 1982. To date, there has been little exploration and no development.

Development in this unit is subject to a seasonal restriction from November 30 to June 1 during periods of heavy snowfall and spring rain and for protecting critical deer and elk winter range.

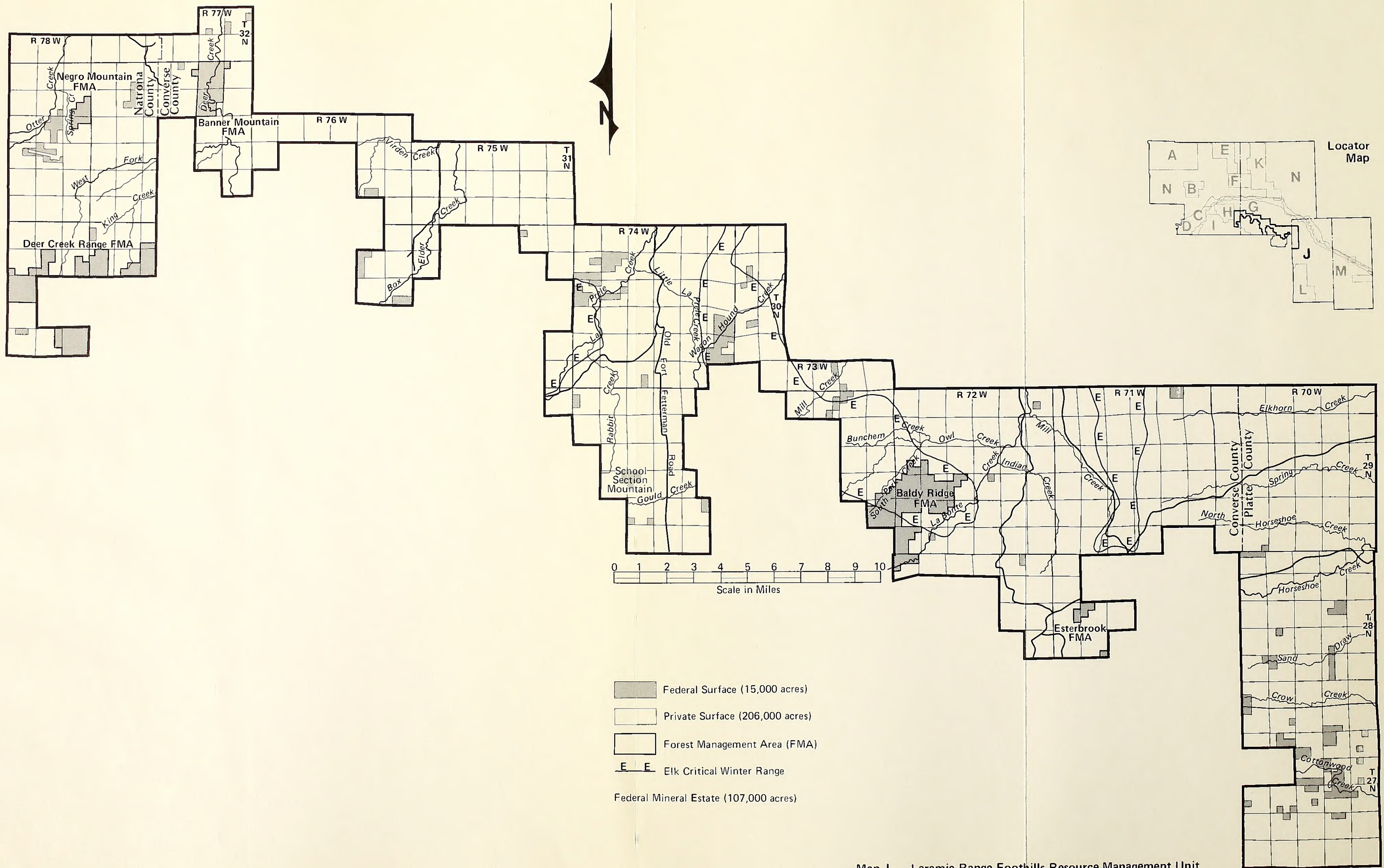
This unit is subject to a surface disturbance restriction on slopes of 25% or greater. Much of this unit has slopes in excess of 25%.

Fire Management

Priority full suppression zones would be delineated for forestry and wildlife resources on 7,750 acres. All other BLM acreage would be managed for full fire suppression.

Cooperative agreements on exchange of fire suppression responsibilities between the Forest Service and Converse County are in operation. An agreement with Platte County would be sought.

The BLM has responsibility for fire suppression



Proposed Management Plan

on all federal lands west of the Old Fort Fetterman Road in Converse County; the Forest Service's Laramie Peak Ranger District has suppression responsibility on federal lands east of that road to Interstate 25 in Platte County.

Limited suppression may be considered for portions of this RMU in extremely rough terrain. Close coordination with the agencies listed above would be sought during the planning and implementation phases of a fire management plan in this RMU.

Forest Management

Priority for forestry would be in the Deer Creek range. Management actions would be as follows.

For Deer Creek Range, we would develop a timber management plan, harvest 175 acres per year, and cut 500 mbf annually for three to four years beginning in 1987. We would obtain 9½ miles of temporary easements and construct 1½ miles of new road. We also would determine whether the Forest Service wants to operate a joint fuelwood sales area.

For Negro Hill, we would conduct a forest reconnaissance in the area, collect data, and determine if a timber management plan would be required. We would harvest at least 500 mbf annually beginning in 1991.

For Baldy Ridge, we would conduct a forest reconnaissance of the area, collect data, and determine if the area can be successfully managed.

For Esterbrook, we would conduct a forest reconnaissance of the area, collect data, and determine the resource potential. Management actions would be initiated accordingly.

For Banner Mountain, we would evaluate the available inventory data, then conduct a reconnaissance of the area to determine if the topography will permit any harvest of timber products.

Grazing Management

All grazing allotments within this unit have been placed in the "C" (custodial) category. Grazing management would be minimal throughout the unit.

Lands

Approximately 3,200 acres have been identified for disposal in this RMU. Disposals would be only by exchange or for public purpose needs.

Easements or cooperative access agreements

may be acquired to initiate the forestry program in the Deer Creek area and other areas within this unit.

Recreation Management

This unit would be managed as an extensive recreation management area where dispersed recreation would be encouraged and where visitors would have freedom of recreational choice with minimal regulatory constraint.

ORV use would be limited to existing roads and vehicle routes on all public lands in the unit.

Recreation management and maintenance would emphasize monitoring, use supervision, and enforcement to resolve user conflicts where necessary. Access to isolated tracts of BLM land would be sought only if public demand warranted such actions. Cooperative landowner agreements would be sought to provide seasonal recreational use of BLM lands.

Soil, Water, and Air

Because public land is limited in this unit, actions would be taken as needed to support other programs such as forestry and recreation. Protection of resources would come from the application of land use decisions as described in appendix B when on-the-ground actions were proposed.

Wildlife

We would monitor use on elk ranges, particularly the Baldy Ridge area, and consider studies and cooperative work with the Forest Service and the WGFD for deer winter ranges. We also would work cooperatively with the WGFD for fisheries enhancement.



Elk on winter range

RMU 11: Ross

The Ross RMU (RMU 11) comprises 24,000 acres of BLM-administered lands, 411,000 acres of state and private lands, and 316,000 acres of federal mineral estate. Important resource values are cultural resources, minerals, and wildlife. Lands and fire management are important support program components.

Cultural resource management would focus on the historic Bozeman Trail and several stage stations along its route. The trail segments would be protected from surface development. Extensive claims for uranium exist. Wildlife management would center on monitoring and protection of sage grouse strutting areas. Land disposals and rights-of-way would be permitted so long as cultural values would not be jeopardized.

Cultural Resources

Management of cultural resources would protect segments of the Bozeman Trail. Trail segments would be protected through ORV closures and prohibition of surface development. The trail segments to be protected from surface disturbance are Holdup Hollow (40 acres), Stinking Water Gulch (670 acres), and Spring Draw (320 acres). These segments are currently being nominated to the National Register. Legal descriptions of the Bozeman Trail segments are included in appendix B.

Energy and Minerals

About 30,000 acres containing about 555 million tons of federal coal would be available for consideration for future leasing or for exchanges. All PRLAs would be processed. The unit contains the Sand Draw PRLA (Peabody), the Stevens North and Stevens South PRLAs (Western Fuels), and the Southern Powder River PRLA (CDT). Coal leases and PRLAs are shown on map 6 in volume 2 of the draft RMP/EIS.

The Thunder Basin National Grassland (TBNG), which is adjacent to this unit, contains about 164,000 acres with about 11 billion tons of federal coal that is acceptable for coal development and would be available for further leasing consideration.

Federal coal land inside the TBNG boundary that may be included in future coal leasing will be subject to the stipulations and mitigation defined in the coal amendment to the Forest Service's land use plan that was completed in 1982. All PRLAs within the TBNG would be processed in

accordance with that plan amendment.

There are 17 mining claims for uranium on 339 sections. The Bill Smith Uranium Mine and the Southern Powder River Basin Uranium mill are shut down, but they probably will start producing in the future.

This unit is considered to have high potential for oil and gas development. Most, if not all, of the unit has been leased for oil and gas, and portions have been heavily developed within the past 15 years.



Tank battery, oil and gas processing facility

No surface development is permitted on parcels of this unit containing segments of the Bozeman Trail. The rest of the unit is subject to land use decisions identified in appendix B.

Lands

Approximately 9,240 acres of public lands in this unit are identified for disposal only by exchange or for public purpose needs.

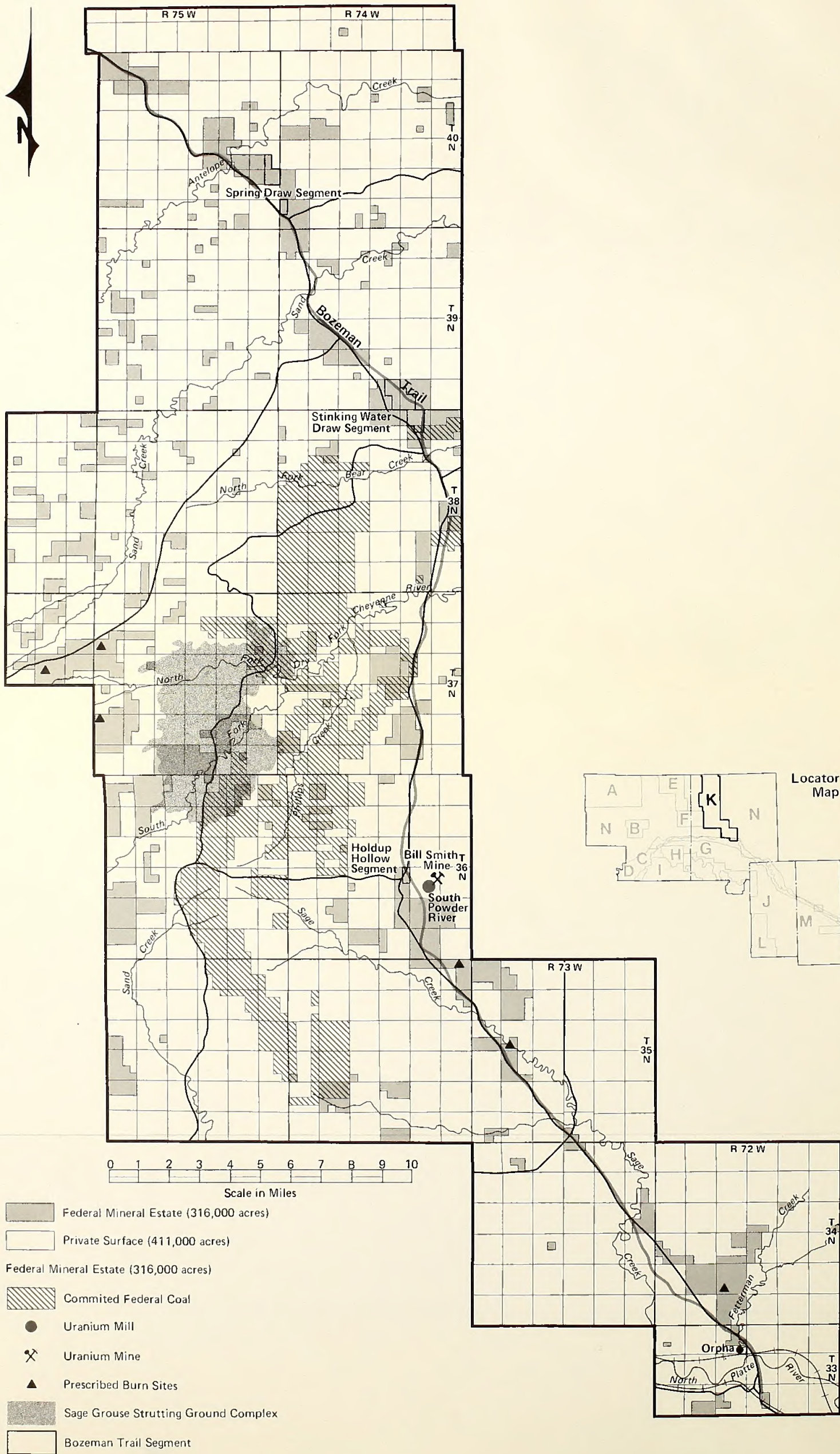
No rights-of-way will be allowed on Pine Ridge.

Fire Management

Prescribed burning would be applied on six sites after completion of an EA and fire plan.

Soil, Water, and Air

The level of management for this unit would be low except for application of resource protection stipulations on historic segments. Decisions that constrain development also would be implemented case by case in the rest of the unit.



Map K Ross Resource Management Unit

Proposed Management Plan

Wildlife

Wildlife management would stress continued monitoring of sage grouse strutting grounds and case-by-case implementation of stipulations on rights-of-way and proposed mineral activity to protect important habitat. We would continue to check prairie dog towns for ferrets and burrowing owls, since this RMU has high potential for these species.

RMU 12: Muleshoe Flats-Richeau Hills

The Muleshoe Flats-Richeau Hills RMU (RMU 12) comprises 52,000 acres of BLM-administered land, 183,000 acres of state and private land, and 280,000 acres of federal mineral estate. While ownership in this unit is highly fragmented, the unit has values and management potential for grazing, wildlife, and lands. Grazing use would be monitored in Muleshoe Flats for proper stocking. Range readiness studies would be used to determine proper seasons of use. We would evaluate critical elk, bighorn sheep, and deer winter ranges. Lands actions would be related chiefly to disposal.

Cultural Resources

Management for cultural resources would consist of inventory and mitigation of proposed surface-disturbing activities.

Energy and Minerals

Mining claims exist on 16 sections.

Potential for oil and gas development in this unit is considered to be moderate. Much of this unit is under lease, but to date there has been no exploration or development.

Critical elk winter range in this unit is protected by a seasonal restriction from November 1 to April 1. The Laramie River is protected by a buffer zone of 600 feet on either side.

Slopes on much of the unit exceed 25%. Surface development in those areas is prohibited except when the restriction is waived. All other land use decisions as identified in appendix B would apply where appropriate.

Fire Management

No priority full suppression zones would be established in this RMU. Scattered parcels covering 34,000 acres would be retained in full suppression, and cooperative fire suppression agreements

would be pursued with Platte County. The Laramie Peak Ranger District of the Medicine Bow National Forest has entered into an agreement on fire suppression with the BLM. The Forest Service will have suppression responsibility north of Slate Creek Road; the BLM will have responsibility south of the road.

Approximately 17,920 acres would be managed for limited fire suppression.

Cooperative agreements with 18 adjoining land-owners would be pursued so that intermingled lands could be included in the limited suppression plan.

Forest Management

Low level forest management would be planned for this unit. Only one area, Squaw Mountain, has timber potential. No forest management action would be taken in this area except in conjunction with wildlife or recreation objectives. We plan to leave the area "as is" for at least the next five years.

Grazing Management

There are two "I" category allotments and three "M" category allotments in this unit. There has been concern about overgrazing on Muleshoe Flats. This area would be monitored for the first five years.

Lands

Approximately 4,960 acres of public land are identified for disposal only by exchange or to meet important public purpose.

No rights-of-way will be allowed on Squaw Mountain.

Acquisition of one easement will be pursued to acquire public access to the Upper Laramie River, but it will be a low priority at this time. Acquisition of this easement, if initiated, would be completed in accordance with an HMP.

Recreation Management

This unit would be managed as an extensive recreation management area where dispersed recreation would be encouraged and where visitors would have freedom of recreational choice with minimal regulatory constraint. ORV use would be limited to existing roads and vehicle routes on all public lands. Recreation management would

emphasize monitoring and use supervision to resolve user conflicts if necessary.

Soil, Water, and Air

No intensive actions would be implemented in this program except in support of other program needs. Existing land use decisions as defined in appendix B would apply to surface development.

Wildlife

Wildlife management would focus on the development of an HMP for the Upper Laramie River. The principal objectives would be improvement of aquatic values. The action items to be considered in the plan would be as follows:

We would pursue acquisition of access (1¼ mile), construct a parking area, and fence it to restrict vehicle traffic. We also would pursue acquisition of a walking easement (¼ mile). (Access acquisition would be a low priority in this area.) We would monitor fishing pressure and cooperate with the Wyoming Game and Fish Department to identify the need for stocking fish or stream improvements.

For all the RMU, we would monitor elk, bighorn sheep, and deer ranges in regard to forage availability and condition. Ferret and burrowing owl searches in prairie dog towns would be conducted as needed.

RMU 13: Rawhide-Table Mountain-Springer/Bump-Sullivan

RMU 13 comprises 2,900 acres of BLM-administered land, 183,000 acres of state and private land, and 9,100 acres of federal mineral estate. The three areas of this RMU are separate land units combined into one large RMU to facilitate management. The principal values are wildlife (waterfowl and upland game birds), recreation, and management of grazing.

The location and resources provide a unique opportunity for concentrated cooperation between the BLM and the Wyoming Game and Fish Department to manage and enhance these unique areas. Other programs would support these values. Lands emphasis would be on acquisition and some disposal in areas outside cooperative management units.

Cultural Resources

Management of cultural resources would consist

of inventory and mitigation of impacts on cultural resources from proposed surface development.

Energy and Minerals

Minerals activity would be at a low level because BLM ownership is limited and there is little potential for locatable or salable reserves.

The potential for oil and gas development in this unit is considered moderate. No development has occurred in this area to date.

For the protection of wildlife and their habitat, no surface development except wildlife projects would be permitted in the Rawhide, Table Mountain, and Springer/Bump-Sullivan wildlife management units.

Fire Management

Management action for fire suppression is not practical because of this unit's remote location. There is a cooperative agreement on fire suppression with Goshen County.

No priority full suppression zones would be established in this RMU. The fire management practice would continue to be full suppression, as it is now.

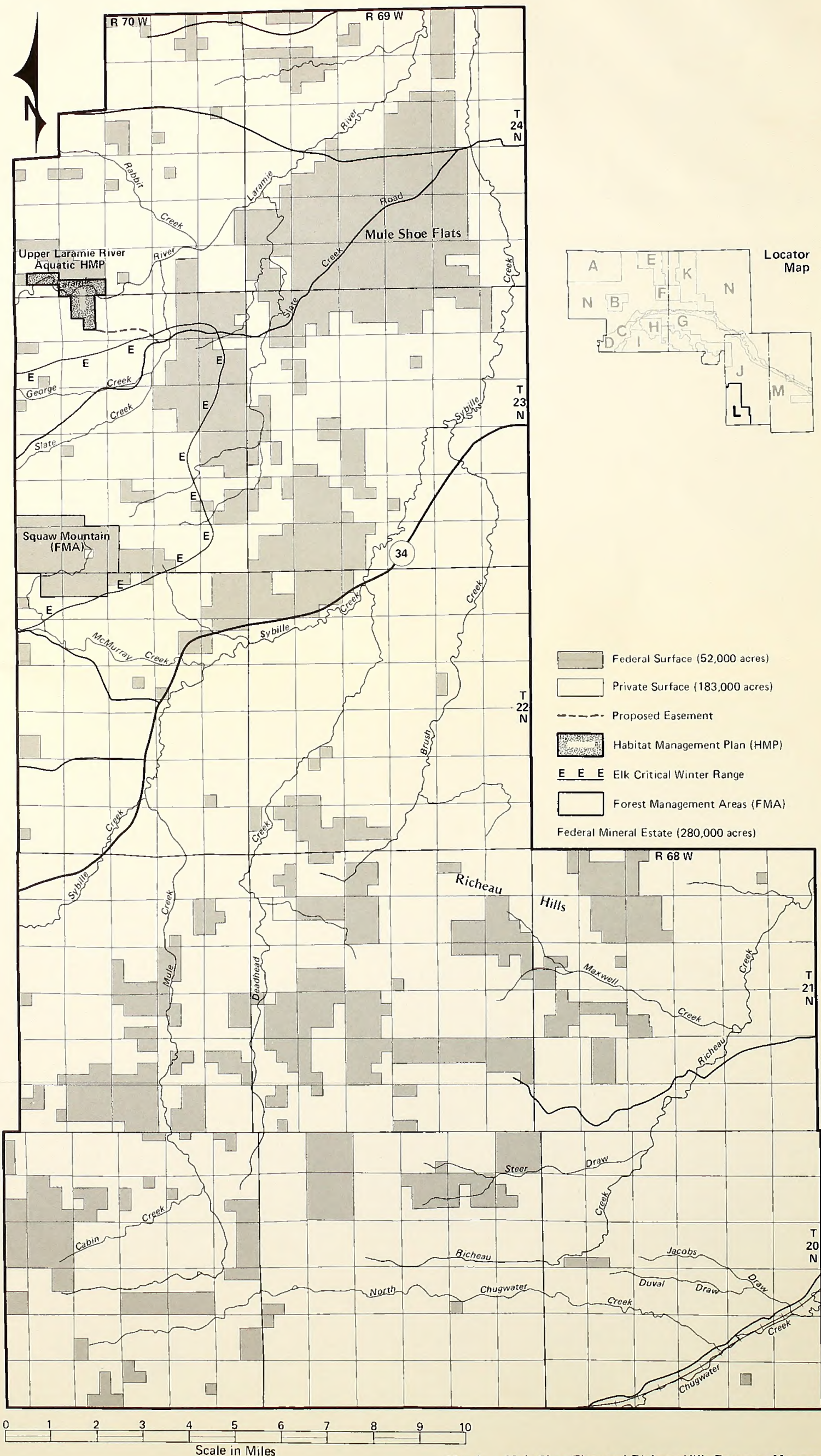
Prescribed fire might be used for vegetative conversion or biomass reduction on the Table Mountain unit if recommended by the WGFD.

Grazing Management

This area contains five "M" category allotments. The AMP and grazing systems for the four lessees on the Table Mountain and Springer/Bump-Sullivan wildlife management units would be continued. The priority for management in all of these areas, including the Rawhide unit, would be wildlife and recreation. Decisions on grazing management would be made through consultation with the Wyoming Game and Fish Department.

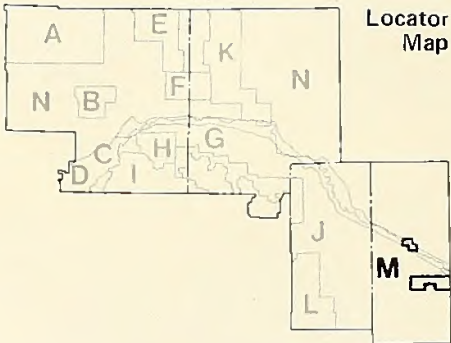
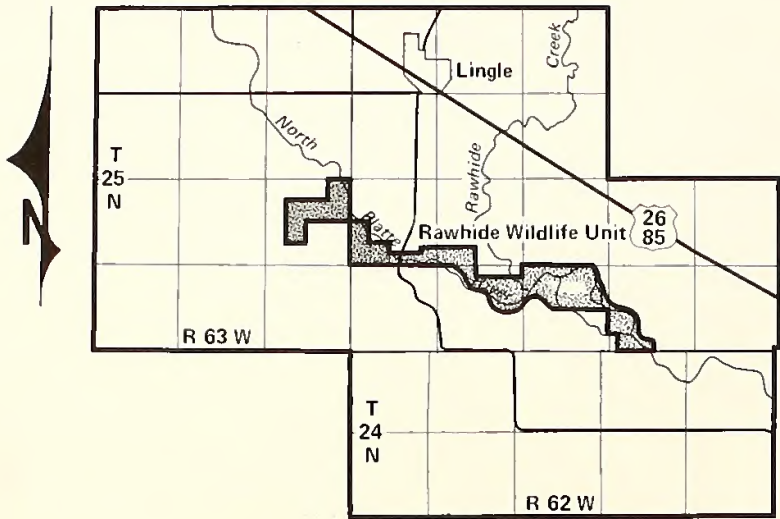
Lands

Approximately 240 acres are identified for disposal in this unit. With the exception of 220 acres under a pending Desert Land Entry application, this land would be disposed of only by exchange or for public purpose needs. The DLE application was filed before the plan was initiated, and it will be considered on its own merits rather than being denied on the basis of this planning decision. The Rawhide parcel is one of the ten riverfront parcels. It may be disposed of only under the R&PP Act.



Map L Mule Shoe Flats and Richeau Hills Resource Management Unit

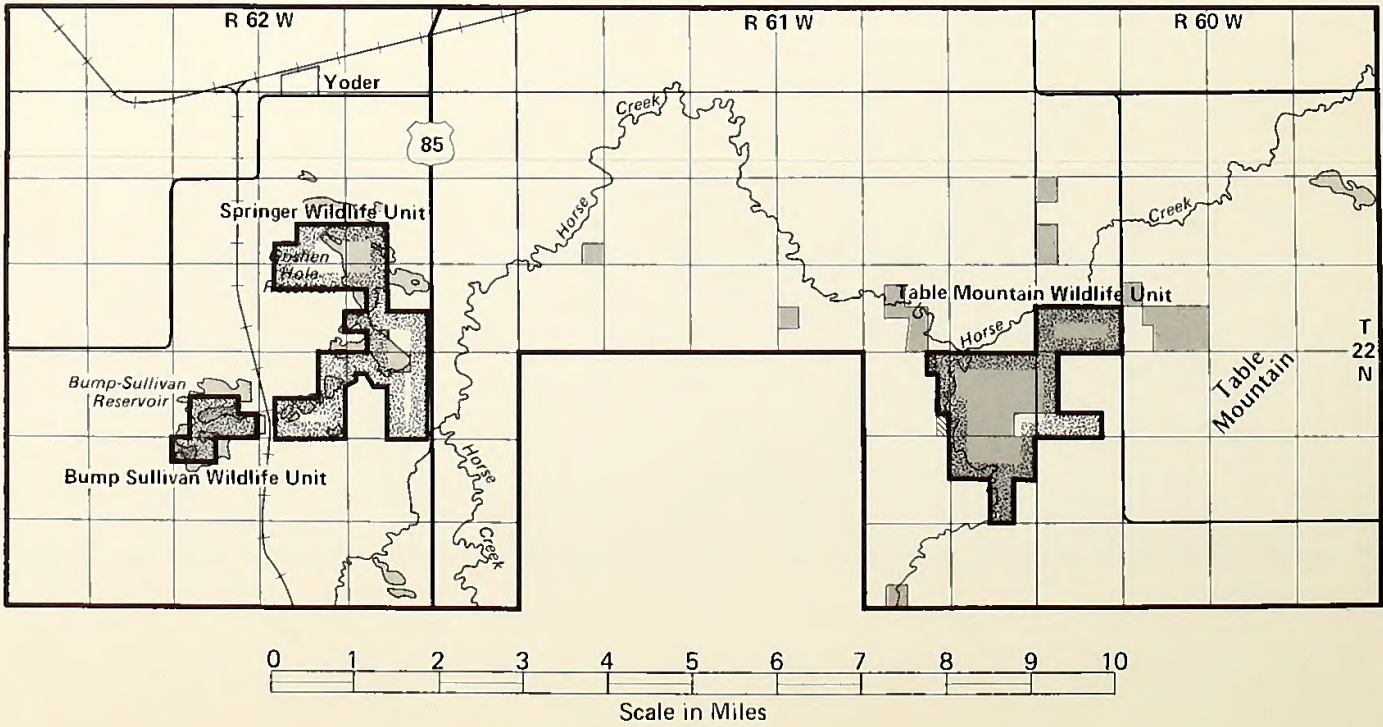
Rawhide



- Federal Surface (2900 acres)
- Private Surface (80,000 acres)
- Wildlife Unit
- Exchange

Federal Mineral Estate (9100 acres)

Table Mountain and Springer-Bump Sullivan



Proposed Management Plan

Special emphasis would be placed on development and management of this area in concert with the Wyoming Game and Fish Department's developments on adjoining lands. One exchange will be pursued to acquire 20 acres of private land adjacent to the Table Mountain Wildlife Unit.

The existing C&MU Act classification will be converted to a withdrawal against mining operations on 2,329.62 acres at Table Mountain and Springer/Bump-Sullivan units.

Recreation Management

Recreation use in these three wildlife management units is intensively managed through a cooperative effort between the Wyoming Game and Fish Department and the BLM. There is a draft HMP for Table Mountain that provides special recreation management for hunting and fishing. Travel is restricted only during waterfowl hunting and nesting seasons.

Springer/Bump-Sullivan Wildlife Management Unit is managed intensively for recreation under joint management as described above. Hunting and fishing are the primary activities. Travel is restricted only during waterfowl hunting and nesting seasons.



Entrance to Table Mountain Wildlife Unit

An HMP would be prepared to provide management guidelines for the Rawhide Wildlife Management Unit. Public land would be added to the unit and managed similarly to existing management provided by the Wyoming Game and Fish Department. Hunting, fishing, and a landing/launching area on the North Platte River would be the primary recreation opportunities.

Soil, Water and Air

No significant management actions for soil, water, and air are anticipated except in support of wildlife programs. Existing land use decisions as described in appendix B would be applied to activities to protect intensive management areas.

Wildlife

As the principal resource program for this unit, the wildlife program would do the following.

For the Table Mountain Wildlife Unit, we would pursue acquisition of 20 acres through exchange. We would construct islands in reservoirs, construct goose nest structures on islands and on reservoir shores, fence and cultivate shelterbelts, seed native grasses in shelterbelts and in pastures, mow cattails and bullrushes, control noxious weeds, and control muskrats, jackrabbits, and prairie dogs. Vehicle traffic would be restricted during nesting and hunting seasons, and surface development would be prohibited except for wildlife projects. We would monitor duck, goose,

and pheasant nesting and recreation use.

For the Springer/Bump-Sullivan Wildlife Unit, we would construct islands in reservoirs, construct goose nest structures on islands and on reservoir shores, fence and cultivate shelterbelts, seed native grasses in shelterbelts and in pastures, mow cattails and bullrushes, control noxious weeds, and control muskrats, jackrabbits, and prairie dogs. Vehicle traffic would be restricted during waterfowl nesting and hunting seasons, and surface development would be prohibited except for wildlife projects. We would monitor duck, goose, and pheasant nesting and recreation use.

For the Rawhide Wildlife Unit, we would consider construction of islands in reservoirs and goose nest structures on islands and on reservoir shores. We also may plant, fence, and cultivate shelterbelts, seed native grasses in shelterbelts and in pastures, mow cattails and bullrushes, control noxious weeds, and control muskrats, jackrabbits, and prairie dogs.

RMU 14: Platte River Resource Area

RMU 14 comprises all lands in the PRRA not included in the other 13 RMUs. It was established to provide a detailed accounting of grazing management, since most allotment boundaries do not coincide with RMU boundaries. There are unitwide resource values and program management needs for all multiple resources that cannot be confined to units. Prescriptions for this RMU address specific management needs and the general area-wide program. All programs are addressed where values and needs exist.

Cultural Resources

In addition to specific sites identified in other RMU prescriptions, seven sites would be protected from surface occupancy or disturbance: Rawhide Buttes Stage Station, Chug Springs Stage Station, Elkhorn Stage Station, Chimney Rock Station, Rawhide Buttes Mining District, 48 NA 227 and Spanish Diggings (48PL48).

A goal for this unit and for the PRRA as a whole would be to establish a cultural data base. Program management would be based on resource needs.

Energy and Minerals

Mining claims are scattered throughout much of the unit. There are many bentonite and uranium claims in Natrona County and Converse County.

Other claims exist for gold, jade, copper, and iron. Assessment work is done annually. Material such as sand and gravel, bentonite, aggregate limestone, moss rock, and flagstone are available throughout the unit. Most public demand would be met through existing pits. New sale sites would be established on public demand.

There is high potential for oil and gas development in the part of the unit lying roughly north of U.S. Highway 20 from Lost Springs to Orin Junction, north of Interstate 25 from Orin Junction to Casper, and northwest of Wyoming 220 from Casper to the resource area boundary, with the exception of the Rattlesnake Mountains. There are numerous fields within that area that produce large quantities of oil or gas, or both. Most of the fields in Converse County have been developed within the past 15 years. New high-producing fields are still being discovered. Most fields in the high potential area of Natrona County are considerably older than those in Converse County. Because of their age, they produce smaller quantities of oil or gas per well.

The Rattlesnake Mountains have low potential for oil and gas. The rest of the unit has low to moderate oil and gas potential.

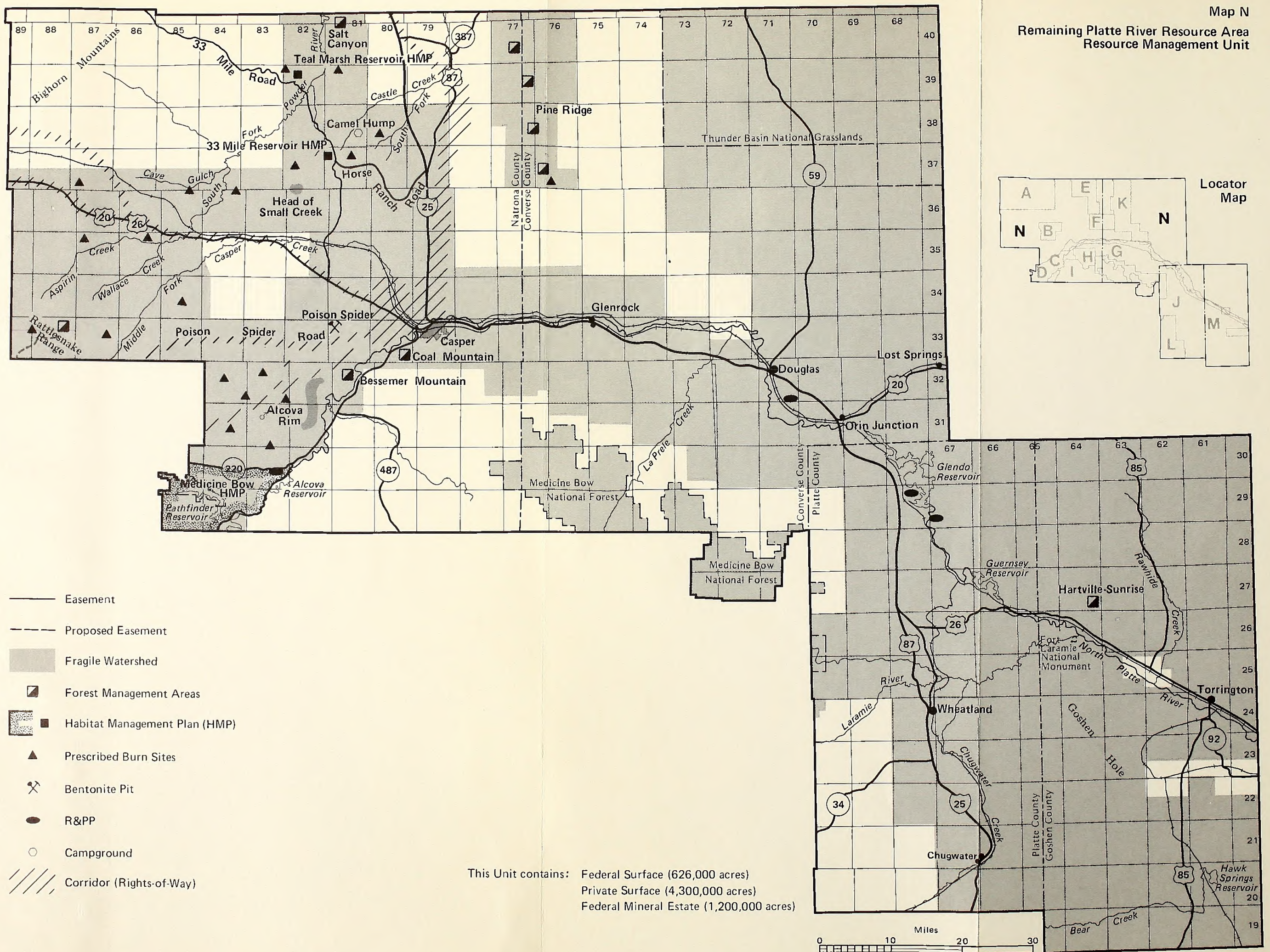
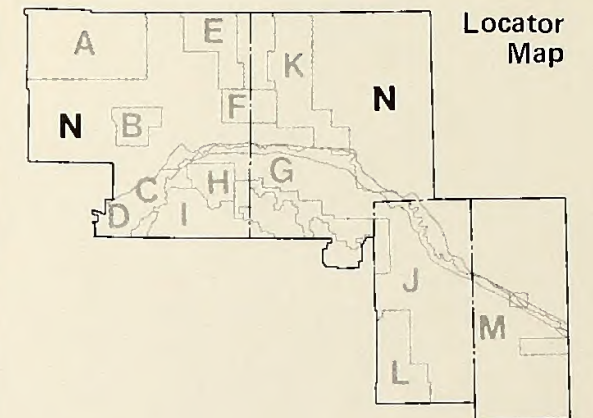
We would authorize exploration and development in accordance with lease provisions. Development would be subject to land use decisions described in appendix B.

Fire Management

On the basis of all previous RMU prescriptions, a total of 778,235 acres of BLM surface would be designated as either priority suppression (67,520 acres), full suppression (194,315 acres) or limited suppression (516,600 acres). That leaves approximately 621,218 acres of BLM surface for consideration in this RMU. Of the 621,218 acres, 16,640 acres would be placed in priority suppression, 348,160 acres in limited suppression, and 256,418 acres would be managed under full suppression. An estimated total of 10,450 acres of this RMU would be addressed in the prescribed fire plan. This would bring the total potential burn treatment area for the PRRA to about 27,000 acres (see table B-1 in appendix B).

We would seek approximately 24 cooperative agreements with owners of adjacent land for inclusion of intermingled ownership lands in the limited suppression plan. This would mean that there would be an estimated total of 105 cooperative agreements in the PRRA when the limited suppression plan was fully implemented.

Map N
Remaining Platte River Resource Area
Resource Management Unit



Proposed Management Plan

Fire management for the entire resource area would incorporate a priority suppression plan, a limited suppression plan, and a prescribed fire plan, as well as the normal fire year plan and the fire suppression constraints required by wildlife, cultural, and watershed resources.

We would continue cooperative agreements on initial attack for fire suppression with the Forest Service, the Wyoming Division of Forestry, Natrona County, Converse County, and Goshen County. Platte County would be included after establishment of agreements.

Forest Management

Management actions would focus largely on collection of data from which to prescribe forest management. Management potential is affected by marginal forestry base, topography, and distance from communities. We would do the following:

For Hartville-Sunrise, we would conduct a forest reconnaissance of the area, collect data, and assess the resource potential. If there should be harvest potential we would sell on demand only, and the permittee would have to arrange access.

For Pine Mountain, we would conduct a forest reconnaissance of the area, collect data, and assess the resource potential. If there should be harvest potential, we would sell on demand only, and the permittee would have to arrange access.

For Salt Canyon, we would conduct a forest reconnaissance of the area, collect data, and assess the resource potential. If there should be harvest potential, we would prepare a plan for the sale and obtain temporary access.

For other isolated tracts, we would conduct a forest reconnaissance of the area, collect data, and assess the resource potential. If there should be harvest potential, we would sell on demand only, and the permittee would have to arrange access. If no potential was found, these areas would be eliminated from the forest base.

For Rattlesnake Mountain, we would conduct a forest reconnaissance, collect data, and assess the resource potential. If sufficient volume should be present to warrant sales, we would sell forest products on demand only.

For Bessemer Mountain, we would conduct a forest reconnaissance, collect data, and determine the management potential.

For Coal Mountain, (part of which is in RMU 8 and part of which is in RMU 14), we would

conduct a forest reconnaissance of the area, collect data, and determine the resource potential. If there should be harvest potential, we would sell forest products on demand.

Grazing Management

Our overall objective for the grazing management program in the PRRA is to prevent overgrazing and downward trends in all leases and to improve livestock forage conditions in 37 "I" category leases and 15 "M" category leases. This is to be accomplished with no adverse impact to wildlife and watershed values. If two alternatives are available that offer comparable benefits to livestock, the alternative that is most beneficial to wildlife and watershed values would be chosen. Custodial ("C") category allotments would be available for sale or other disposal if all criteria were met.

All lease expiration dates would continue to be February 28, 1990. Existing grazing preference allocations would remain unchanged. Future upward or downward changes could be allocated to livestock, wildlife, watershed, or a combination of these three land uses.

Livestock kinds, seasons, and numbers would continue to be authorized as shown in appendix D of the draft RMP/EIS. Allotment boundaries and base property locations would be recertified for all "I" and "M" allotments.

A base property requirement of 90 days would be established for the entire resource area. This 90-day requirement would be determined according to a formula developed by the BLM. An exception would have to be made for existing allotments that have historically had less base property than that necessary to meet a 90-day requirement. For those allotments, future reductions in size or division of the allotment would not be possible unless it could be combined with an adjacent allotment that meets the 90-day requirement.

Preference statements (annual grazing lease applications) would be sent to all lease holders of "I" and "M" category allotments.

"C" category allotments would be leased year-round if no other information was available.

We would continue to operate two AMPs for the Bates Creek and Table Mountain allotments. Additional AMPs would not be written unless a serious livestock use conflict was found. Livestock grazing management problems would be handled through the use of lease stipulations. All new

Proposed Management Plan

construction projects would be supported with a plan of development on allotments not having AMPs.

Cooperative management agreements would not be initiated from 1985 through 1989. After 1989, agreements could be made on "I" and "M" category allotments if personnel and funding were available after completion of work in high priority "I" category allotments.

The intensity of use supervision would vary according to allotment category and the level of studies implemented. Use supervision would range from field verification of actual use to field checks of forage utilization. For a more detailed description by allotment, see tables B-2 and B-3 in appendix B.

Use supervision on "C" category allotments would be handled as specific problems arise, or on a minimum of ten allotments per year. Supervision would amount to a verification of livestock use, estimate of range condition and use, and photographs of public land in the allotment.

Range site mapping would be completed for the slope west and north of Buffalo Creek on the Buffalo Creek and Willow Creek ranches, an area of approximately 50,000 acres.

Grazing permittees would have to provide actual use data annually for the first five years. Thereafter, requirement for actual use data might be limited to "I" category allotments.



Cattle on typical sagebrush/grass range

Forage utilization studies would vary from permanently located transects to an ocular estimate for complete pastures. The studies would be closely tied to use supervision. Permanent trend transects would be located in higher priority "I" category allotments where potential use problems exist. More transects might be installed after the first five years.

Additional rain gauges would be installed. Locations would be coordinated with soils and vegetation benchmark studies.

Range readiness and plant phenology studies would be used in critical spring or early summer pastures, particularly in areas of higher elevation such as the South Big Horns, Muddy Mountain, Deer Creek range, and Rattlesnake range.

Proposed Management Plan

We would conduct special studies in selected high erosion areas and areas of potential conflict between livestock and big game. These studies would be expanded at the end of five years if problems were found.

We would conduct intensive studies on trend, wildlife, watershed, range site mapping, or high use supervision for some high priority "I" allotments. Ranchers would be contacted for project work or if problems should be found through use supervision.

Funds generally would be allocated first to project developments in "I" category allotments, second to "M" allotments, and last to "C" allotments. Allotment-wide projects would take precedence over single, isolated projects.

Grazing fee funds or range betterment funds would not be used to build or maintain fences to exclude livestock grazing to the benefit of other activities. Examples of such projects are fences around reservoirs, riparian areas, and recreation sites.

Stock driveway fences would be maintained jointly by the BLM and the adjoining grazing

lessee. The BLM would provide materials and the lessee would provide labor.

Water developments normally would be constructed by the BLM and maintained by the user. The BLM would provide most of the funds for drilling and casing wells, with the rancher supplying all down hole and above-ground equipment.

BLM funding of major reconstruction projects would be determined case by case.

The following decisions on stock driveway use would continue to be implemented:

Where stock driveways were used only lightly for trailing and not fenced, the BLM would either lease to the grazing lessee whose lease most practically could make use of the area or reserve the AUMs for trailing.

Where forage remained after the trailing period on stock driveways, the areas could be leased for supplemental use on a year-to-year basis.

All other stock driveways would be used exclusively for trailing livestock.



Fifty Mile Flat, Thirty-three Mile stock driveway. This part of the driveway follows the route of the Oregon Trail.

The BLM would cooperate with the four county weed control districts in the control of noxious weeds on BLM-administered lands. Control measures would conform to the procedures outlined in the EA for noxious weed control (USDI, BLM 1982a).

We would cooperate with local, state, and other federal agencies to control grasshopper infestations. Control measures would be in accordance

with the procedures contained in the *Rangeland Grasshopper Cooperative Management Program: Final EIS* (USDA, APHIS and USDI, BLM 1980).

Prairie dog towns may be poisoned unless a sighting of a black-footed ferret has been documented with the previous five years, or unless the USFWS indicates maintenance of the town is essential to the survival of the ferret.

Proposed Management Plan

Lands

Approximately 79,700 acres of public land are identified for disposal in this unit. No limitation is placed on the type of disposal. Seven areas containing 1,418.88 acres are identified for disposal only under the R&PP Act. These are Natrona County School Site (40.00 acres), Torrington Area (120.00 acres), Glendo Reservoir (91.80 acres), Gray Rocks Reservoir (278.00 acres), Casper Area (200.00 acres), Esterbrook Townsite (29.26 acres), and an area adjacent to the Converse County Park (659.82 acres). Of this total, 200 acres in the Casper area can be disposed of by any means after 1987 if no R&PP lease or patent is issued by that time.

Six R&PP lease and patents are present in this unit and would continue to be developed for and used by the public. Exchanges would be pursued in the Rattlesnake Range, and other exchanges could be proposed by interested parties. An active sale program would be undertaken for these disposal lands. A disposal plan will be prepared for the entire resource area, with primary focus on this unit. Priority of disposal will be established to the extent possible in this plan.

Five corridors are designated in the resource area, all of which are in Natrona County. Major rights-of-way would be confined to these designated corridors whenever possible. When placement of a major facility within a designated corridor is not possible, and for smaller right-of-way facilities, placement would be adjacent to existing facilities or disturbances. Cross-country right-of-way placement would be allowed only when placement in a designated corridor or adjacent to an existing facility is not practical or feasible. New corridors would be designated only when placement as indicated above is not practical and when the environmental impacts can be adequately mitigated. Designated corridor widths and the sizes and types of facilities allowed are as follows:

Oregon Trail: This corridor consists of three segments. Segment A is approximately 1 mile north of the Oregon Trail Road between the west boundary of the resource area and Oil Mountain. This segment will be used by all types and sizes of facilities. To the extent possible, the southern ½ mile of the corridor width will be used for power lines and overhead facilities and the northern ½ mile will be used for pipelines and other buried facilities. Segment B extends between Oil Mountain and Casper, generally parallel to the Oregon Trail and over Emigrant Ridge. All sizes of overhead facilities will be considered in this segment.

Segment C branches from the Oil Mountain area, around the north edge of Oil Mountain, then along Poison Spider Road into Casper. This segment will be used for all types and sizes of rights-of-way, but primarily for buried facilities.

Poison Spider Road: This corridor is ½ mile wide, ¼ mile on either side of the road between the west boundary of the resource area and the junction with Segment C of the Oregon Trail corridor. Only wood pole power lines and telephone lines will be considered in this corridor.

U.S. Highway 20-26: This corridor will be 3 miles wide, 1 ½ miles on either side of the highway. All types and sizes of facilities will be considered.

Wyoming Highway 259/U.S. 87: This corridor is 2 miles wide between Casper and Ormsby road, 5 miles wide between Ormsby Road and Midwest, and 1 mile wide from Midwest to the northern boundary of the resource area. All sizes and types of facilities will be considered. Routing changes will be made to avoid conflicts with the town of Midwest and oil and gas production in the Salt Creek Field.

Wyoming Highway 387: This corridor is 2 miles wide, extending from west of Midwest past Edgerton to the northern boundary of the resource area. Wood pole power and telephone lines will be considered in this corridor. Routing adjustments will be made to minimize the impacts on the towns of Midwest and Edgerton and on oil field operations.

No rights-of-way will be allowed in the following areas: Wyoming Highway 220 from Bessemer Mountain to Alcova; I-25 in Ts. 37, 38, and 39 N., Rs. 79 and 80 W.; Rattlesnake Range; Pine Ridge; north and west of the Badwater, Lost Cabin-Arminto, and Buffalo Creek Roads and the Redwall ACEC; Muddy Mountain elk winter range; within 1 mile of the North Platte River; Jackson Canyon ACEC; Squaw Mountain; and the towns of Midwest and Edgerton except for utility lines serving these towns and roads and facilities necessary for operation of the Salt Creek oil field.

One exception will be made if oil and gas production is achieved in the South Big Horn Mountains. At that time, rights-of-way will be allowed only in accordance with an approved oil field development plan. Rights-of-way needed to transport products out of the area must parallel county roads except for the Big Horn Mountains, Okie Trail, and Buffalo Creek county roads.

Acquisition of two easements will be pursued for public access along the Horse Ranch and Canyon Creek roads.

Proposed Management Plan

Recreation Management

Generally, the unit would be managed as an extensive recreation management area where dispersed recreation would be encouraged and where visitors would have freedom of recreational choice with minimal regulatory constraint. Recreation management and maintenance would emphasize monitoring, use supervision, and enforcement to resolve user conflicts and provide resource protection.

ORV use would be limited to existing roads and vehicle routes on all public lands except for the

Poison Spider Bentonite Pit. This 200-acre area would be designated an open area for all forms of ORV use year-round. The BLM would seek assistance in managing the area through the use of a special recreation use permit, which would provide for a local ORV group to assist in managing, maintenance, and monitoring. Support facilities would be vault latrines, picnic tables, and trash cans.

The BLM would continue to manage and maintain Camel Hump Campground for camping. Only minimum facilities are planned: one vault latrine, designated parking and camping areas, picnic tables, and trash cans.



Eight-hour cross-country race in Natrona County. A cooperative endeavor of the BLM, the High Plains Drifters Motorcycle Club, and a private landowner.

Soil, Water and Air

The following sensitive drainages would be studied further to determine the need for additional protective measures and for the development and implementation of watershed management plans: Cloud Creek, Cave Gulch, Castle Creek, Aspirin Creek, and Wallace Creek. The same kind of studies would be done on the fragile watershed areas Alcova Rim and at the head of Small Creek: T. 36 N., R. 82 W.; T. 38 N., R. 82 W., Sec. 4; and T. 39 N., R. 82 W., Secs. 33 and 34.

Level II stream surveys would continue until a statistically reliable data base could be established. Progress also would continue toward completion

of the order III soil survey now being conducted for the rest of the unit.

The inventory of water right quantification on public land would continue, but it would not be completed by October 1985 without additional personnel and funding.

National Pollutant Discharge Elimination System monitoring would continue on point discharges in oil fields.

Wildlife

The following wildlife management would be implemented:

Proposed Management Plan

For the Medicine Bow HMP, we would fence riparian areas, improve springs and seeps, control beaver populations with assistance from WGFD, and monitor and study habitat condition and trend and wildlife use.

For the Thirty-three Mile Reservoir HMP, we would provide exclosure fencing and initiate a study to determine the nesting density of waterfowl and shorebirds.

For the Teal Marsh Reservoir HMP, we would provide exclosure fencing, study the nesting density of waterfowl and shorebirds, fence the wetlands portion of the reservoir, annually initiate studies of antelope and deer winter ranges for condition of browse, monitor sage grouse and raptor nesting, mitigate oil and gas realty actions, and change fences in antelope critical winter range to meet standard specifications.

To determine if an action is fulfilling the purpose and need for which it was designed, or if there is a need for modification or termination of an action

To discover anticipated or unpredictable effects

To determine if mitigating measures are working as prescribed

To ensure that decisions are being implemented as scheduled

To provide continuing evaluation of consistency with state and local plans and programs

To provide for continuing comparison of plan benefits versus costs, including social, economic, and environmental aspects

Monitoring plans for specific programs will be developed as needed.

MONITORING AND EVALUATION

The decisions outlined in the Platte RMP will be implemented over a period of ten years or more, depending on the availability of funding and personnel. The effects of implementation will be monitored and evaluated periodically over the life of this plan. The general purposes of this monitoring and evaluation will be as follows:

The data collected from the monitoring and evaluation process will be analyzed and fed back into the decision-making process. This will provide information regarding the effects of the land use decisions and the adequacy of mitigation methods. If monitoring indicates that significant unexpected adverse impacts are occurring or that mitigating measures are not working as predicted, it may be necessary to amend or revise the RMP. Conversely, if implementation and mitigating efforts are highly successful, monitoring and evaluation efforts may be reduced.



Stream monitoring gauge in Salt Creek ACEC

Coordination & Consultation



CHAPTER 6

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INTRODUCTION

The Platte River RMP/EIS was prepared by an interdisciplinary team of specialists from the PRRA and the Casper District Office. In-depth reviews for accuracy and consistency were provided by both the district office and state office staffs.

Consultation, coordination, and public involvement have occurred throughout the process through public meetings, informal meetings, individual contacts, a newsletter, and *Federal Register* notices.

Writing of the document began in the summer of 1983. Much of the analysis, research, inventory, public involvement, and interagency coordination was done before that time.

potential issues and invited comment. Fourteen responses were received. Five requested placement on the mailing list; nine presented comments or concerns to be addressed in the RMP. Six of the comments were from Wyoming State agencies, two from local government sources, and one from industry.

A notice of intent to prepare a plan was published in December 1981. From the time the notice was published until April 28, 1983, 56 responses were received. A news release on April 28, 1983, announced four public meetings to be held in May. At the same time, a newsletter listing planning issues and criteria was mailed to approximately 1,000 agencies, organizations, and individuals. The newsletter announced the meetings and contained a postage paid response form.

PUBLIC PARTICIPATION

A public participation plan was prepared to ensure that the public would have numerous opportunities to be actively involved in the planning and environmental processes. Both formal and informal input have been encouraged and utilized.

Two *Federal Register* notices have been published. The February 11, 1980, notice identified

A total of 167 written or telephoned responses had been received as of September 1, 1983. That total does not include comments received at the public meetings. Of the 223 responses received from the notice of intent and the newsletter, 11 were from federal agencies, 8 from local governmental units, 21 from interest groups (of which more than half were from conservation groups), 94 from business and industry (of which more than half were from the minerals industries), 67 from individuals (many of whom are grazing lessees), and 3 from other sources.



Public meeting in Torrington

Coordination

The Casper District Advisory Council and the Grazing Board have been kept apprised of the RMP progress and their comments have been solicited.

Each operator of an "I" or "M" category grazing allotment has been contacted either in person or in writing to discuss the categorization of that allotment.



Stock trail tour with BLM and members of the Thirty-three Mile/Arminto Stock Trail Committee

Formal and informal meetings have been held with many members of the ranching and minerals communities and with other interest groups and agencies. A list of respondents and their concerns is on file in the PRRA office.

During the 90-day comment period following publication of the draft RMP/EIS, we received comments in 43 letters, public meeting forms, and oral communications. These communications are reproduced in chapter 7, which contains responses to 261 comments.

Four public meetings were held in Wheatland, Torrington, Douglas, and Casper in April 1984. The BLM also met with the Wyoming Game and Fish Department, with ranchers from Natrona County, and with representatives from True Oil, Rocky Mountain Oil and Gas Association, Wyoming Petroleum Association, and the Independent Petroleum Association of America.

CONSISTENCY

Coordination with other agencies and consistency with other plans was accomplished through

continuous communications and cooperative efforts between the BLM and involved federal, state, and local agencies and organizations.

The Wyoming Governor's Clearinghouse was supplied with numerous copies of this draft document for review to ensure consistency with the state's ongoing plans. We believed we have addressed all the comments from state agencies and that the plan meets the consistency requirements defined in FLMPA. County land use plans for the four counties have been reviewed by the RMP team to ensure consistency. Regular meetings have been held with the Natrona County Commissioners to promote greater understanding of the goals, objectives, and resources of both the county and the BLM.

Forest Service plans for the Medicine Bow National Forest and the Thunder Basin National Grassland have been reviewed and forest supervision consulted.

Local groups such as the Casper Mountain Pine Beetle Association have been consulted to ensure that all parties are aware of one another's plans and objectives. A complete list of agencies and organizations consulted is available at the PRRA office.

Coordination

CONSULTATION/COORDINATION

Members of the RMP team have consulted formally or informally with numerous agencies, groups, and individuals throughout the process. The following are some of the agencies, organizations, and individuals consulted.

Federal Agencies

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Commerce

- Bureau of the Census

Department of the Interior

- Bureau of Reclamation
- Fish and Wildlife Service
- Geological Survey
- National Park Service

State of Wyoming Agencies

- Community Development Authority
- Department of Agriculture
- Department of Environmental Quality
- Game and Fish Department
- Geological Survey
- Highway Department
- Industrial Siting Commission
- Oil and Gas Conservation Commission
- Recreation Commission
- State Engineer
- State Forester
- State Historic Preservation Officer
- Water Development Commission

Local Governments

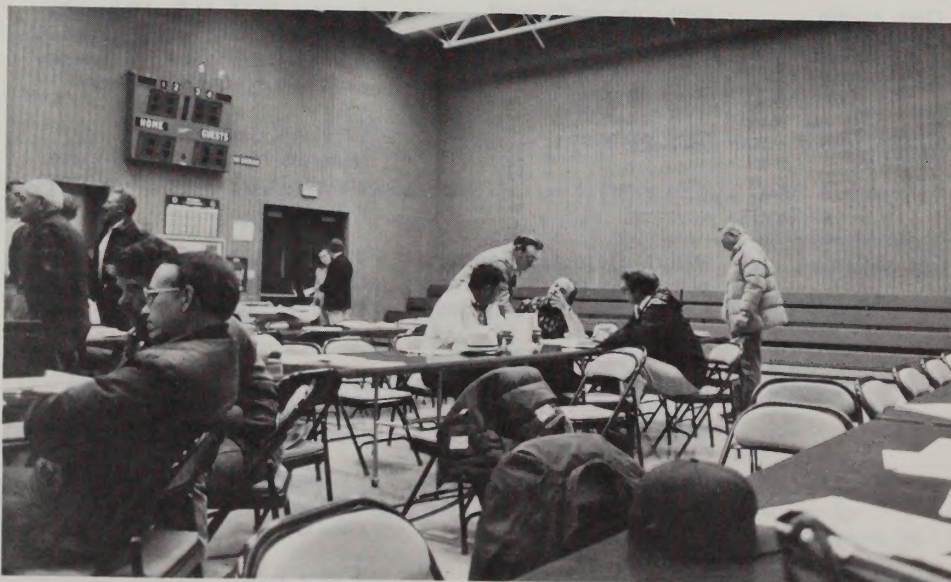
Commissioners of Converse, Goshen, Natrona, and Platte counties.

Organizations, Businesses, and Individuals

- Casper District Advisory Council
- Casper District Grazing Board
- Casper Mountain Pine Beetle Association
- Grazing lessees with "I" and "M" category allotments
- Natrona County Farm Bureau
- Petroleum Association of Wyoming
- Rocky Mountain Oil and Gas Association
- Wyoming Contractors Association

DISTRIBUTION

Copies of the draft and final documents are available for review in the BLM offices at Lander, Rawlins, Worland, Buffalo, and Newcastle, in the Casper District office, and in the county libraries in Albany, Campbell, Converse, Goshen, Johnson, Laramie, Natrona, Niobrara, and Platte counties. The revised chapter 3, which has not been reprinted in this final RMP/EIS, is available for review at the PRRA office in Casper, and copies may be requested from that office.



Public meeting in Wheatland

Coordination

PREPARERS

Name	Position/Responsibilities	Qualifications
Management		
Tim Monroe	Casper District Manager/ Management Guidance	10 years BLM, 6 years Bureau of Outdoor Recreation. Former Utah state legislator. University of Utah, Journalism.
Jim Melton	Platte River Resource Area Manager/RMP Project Manager/Socioeconomic Information	9 years BLM, 4 years Texas Parks and Wildlife Dept. M.S., Texas A&M University, Recreation & Park Development; B.S., Texas A&M University, Agronomy.
RMP/EIS Core Team		
Ray Stroup	Outdoor Recreation Planner/RMP Team Leader, Recreation, Visual Resources, Public Involvement	2 years BLM; 4 years Heritage Conservation and Recreation Service, 5 years Bureau of Outdoor Recreation, 2 years Ohio Dept. of Natural Resources, 1 year City of Bexley, Ohio, Parks Dept. M.S., Ohio State, Natural Resources; B.S., Youngstown State University, Psychology/Business Administration.
Don Whyde	Planning Coordinator/RMP Co-Team Leader, Consistency Review	12 years BLM, 7 years Forest Service. B.S., University of Montana, Forest Management.
Casper District RMP/EIS Interdisciplinary Team		
Dale Austin	Archeologist/Cultural Resources	4 years BLM. M.S., University Wyoming, Park and Recreation Administration; B.A., University of Wyoming, Anthropology.
Chuck Cioc	Cartographer	27 years Geological Survey, Minerals Management Service, and BLM; 12 years in geophysics industry.
Leo Coleman	Natural Resource Specialist/ Watershed and Soils, Water, Air, Climate, Oil and Gas, Paleontology	8 years BLM. B.S., Iowa State University, Fish and Wildlife Management.
Willie Fitzgerald	Wildlife Biologist/ Wildlife, Fisheries	5 years BLM, 1 year Forest Service. B.S., Colorado State University, Wildlife Management.
Jim Herold	Forester/Forest Resources	31 years BLM. B.S., University of Washington; A.A., Santa Monica City College, California.
Patricia Hiller	Word Processing	1 year with BLM, 4 years with industry. Attended Casper College, Bookkeeping.

Coordination

PREPARERS (Continued)

Name	Position/Responsibilities	Qualifications
Jim Johnson	Natural Resource Specialist	5 years BLM, 9 years National Park Service. B.S., Colorado State University, Outdoor Recreation.
Lou Layman	Writer-Editor	5 years editing BLM documents, 2 years editing National Park Service documents. B.S. Journalism, University of Colorado.
Larry Marks	Economist/Economic Profiles	3 years BLM, 1 year Farmers Home Administration (USDA), 4 years Foreign Agricultural Service (USDA). M.S., Colorado State University, Agricultural Economics; B.S., Colorado State University, Farm and Ranch Management.
Terry Matchett	Range Conservationist Range Management	16 years BLM. B.S., University of Montana, Forestry/Range Management.
Mike McLellan	Wildlife Biologist	7 years BLM, previously Natural Resource Specialist, Sonoma-Gerlach Resource Area, Winnemucca (Nev.) District. B.S., Wildlife Management, Humboldt State University, California.
Dorothy Moore	Word Processing	3 years BLM, 2½ years private industry.
Glen Nebeker	Environmental Coordinator Review	4 years BLM, 1 year Brigham Young University. M.S., Brigham Young University, Botany; B.S., Weber State College, Botany.
Russ Riebe	Range Technician/Fire Management	2 years BLM, 2 years Forest Service. B.S., University of Montana, Range Management
Cloetta Schroeder	Word Processing	4 years BLM, 1 year private industry. Associate Degree in Data Processing, Casper College; Certificate of Secretarial Science.
Randy Sorenson	Realty Specialist/Lands	6 years BLM.
Jack Steuerwald	Geologist/Coal, Locatable and Salable Minerals	3 years BLM, 20 years as material engineer and geologist for highway contractors, 4 years as as mine geologist in industry. M.S. University of Tennessee, Geology; B.S., University of Wisconsin, Geology.

Coordination

PREPARERS (Continued)

Name	Position/Responsibilities	Qualifications
Runore Wycoff	Natural Resource Specialist/Planning & Public Involvement	2 years BLM, 3 years Heritage Conservation and Recreation Service. M.S., University of Maryland, Resource Planning; B. S., Michigan State University, Park Administration; B.S., Michigan State University, Resource Development

Support Services

Name	Position/Responsibility
Bob Childs	Chief, Casper District Planning and Environmental Assistance
Ken Harrison	Chief, Wyoming State Office Planning and Environmental Assistance
Mike Mescher	Project Coordination, Wyoming State Office
Terri Mitchell	Cartographer, Wyoming State Office
Joanie Redfield	Public Affairs Specialist, Wyoming State Office
Carol Ross	Graphics, Wyoming State Office
Carl Santmyer	Sociology, Wyoming State Office
Tina Warren	Phototypesetting, Wyoming State Office
Jon Winemiller	Supervisory Draftsman, Wyoming State Office

Coordination, support, and review were provided by the Division of Minerals, Lands, and Renewable Resources and the Division of Operations, Casper District. From the Wyoming State Office, the Division of Minerals, Lands, and Renewable Resources, Branch of Biological Resources and Branch of Planning and Environmental Assistance, provided coordination and review.

Printing arrangements were made by the Branch of Administrative Services, Wyoming State Office.

Comments & Responses



CHAPTER 7

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Comments and Responses

INTRODUCTION

A total of 43 individuals, private organizations, and federal, state, and local agencies submitted comments on the recommendations and/or analysis in the draft Platte RMP/EIS. We have responded to 261 comments from the 43 submissions. Table 7-1 shows the comment number and the name of the person or organization commenting. The numbers indicate the order in which the comments were received.

All comments are printed verbatim. A few handwritten comments have been typed verbatim

for better readability. The response to a comment either identifies that a change was made or provides the rationale if a change was not considered necessary. In many cases where similar comments required the same response, a reference to the first response has been noted.

For ease in identifying the comment source, all written comments received are referred to as "letters" in this section, whether the comment came in a mailed letter, orally, or on a comment sheet from a public meeting. Each written comment source is numbered. Thus, "Letter 4" consists of comments handwritten on a comment sheet provided by the BLM at a public meeting.

TABLE 7-1
COMMENTS RECEIVED

Assigned Number (In Order of Receipt)	Name of Commenter
1.	C. G. Christensen
2.	U.S. Bureau of Mines
3.	U.S. Soil Conservation Service
4.	Springer and Donna Jones
5.	W. L. Stearns
6.	Brian Spradling
7.	Lyle Reber
8.	Wyoming Game and Fish Department (Rothwell)
9.	Percy Cooper/Jon C. Nicolaysen
10.	U.S. Department of Housing and Urban Development
11.	Conoco, Inc.
12.	U.S. Office of Surface Mining
13.	Chevron U.S.A., Inc.
14.	Petroleum Association of Wyoming
15.	Eldon L. Allison, Jr.
16.	Wyoming Executive Department (Governor Ed Herschler)
17.	Geological Survey of Wyoming
18.	Wyoming Department of Environmental Quality
19.	Wyoming Game and Fish Department (Petra)
20.	Wyoming Executive Department (Miller)
21.	Wyoming Oil and Gas Conservation Commission
22.	Wyoming Commissioner of Public Lands and Farm Loans
23.	Wyoming State Engineer's Office
24.	Wyoming Recreation Commission
25.	Wyoming State Historic Preservation Office
26.	Noranda Exploration, Inc.
27.	Rocky Mountain Oil and Gas Association, Inc.
28.	True Oil Company
29.	National Park Service
30.	U.S. Department of Energy
31.	U.S. Fish and Wildlife Service
32.	U.S. Bureau of Reclamation
33.	Southern California Edison Company
34.	JY Ranch, Inc.
35.	Willard Woods, M.D.
36.	Laramie River Ranch
37.	Natrona County Planning Commission
38.	Exxon Company, U.S.A.
39.	U.S. Environmental Protection Agency
40.	High Plains Drifters MC
41.	Cole Creek Sheep Company
42.	Natrona County Farm Bureau
43.	Charles Scott

COMMENTS AND RESPONSES

1

C. G. Christensen

P.O. Box 161
Casper, Wyoming 82602
Phone: 266-4200

March 30, 1984

Mr. Jim Melton, Area Manager
U.S. Dept. of the Interior
Bureau of Land Management
951 Rancho Road
Casper, WY 82601

ACTION	INITIALS	DATE
RECEIVED		
FILED		
INDEXED		
SEARCHED		
SERIALIZED		
FILED		
RECEIVED		
FILED		
INDEXED		
SEARCHED		
SERIALIZED		
FILED		
RECEIVED		
FILED		
INDEXED		
SEARCHED		
SERIALIZED		
FILED		

RE: RMP/EIS

Mr. Melton:

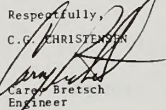
This is to officially respond to the above referenced Platte River Resource Area, Environmental Impact Statement. Of particular interest to me, is the plan prohibiting the sale of sand and gravel within a quarter mile of the Platte River.

C.G. Christensen currently operates a mine located at S4SW1/4NE4, N4NW1/4SE4, Section 11, T.31 N., R.82 W. in Natrona County. This mine is located within a quarter mile of the Platte River, and mining would be prohibited under the new plan.

1 C.G. Christensen has mined this parcel of land for four years now. I believe this new plan discriminates against operators of existing mines, and therefore I urge you to examine the possibility of including a Grandfather Clause in this new Resource Management Plan. This would allow currently operating mines the opportunity to continue as they have for years.

The gravel mine operated by C.G. Christensen is not a threat to the environment, and as a small business in the State of Wyoming, to discontinue operations at this mine would be an economic loss to both C.G. Christensen and the County of Natrona. Therefore, I strongly urge you to take another look at this plan and consider the individual cases along with the economic well-being of Natrona County and the State of Wyoming. I believe that together, we can preserve Wyoming's environment and still keep Wyoming's small businesses competitive.

Thank you for your prompt attention and consideration in this matter.

Respectfully,
C.G. CHRISTENSEN

Carol Bretsch
Engineer

CB/dk

Response to Letter 1

1. We agree that the intention was not clear. It is not the BLM's intention that existing mines be closed.

The preferred management plan now includes the statement "Currently authorized sand and gravel operations on federal minerals within the 1/4-mile buffer on the North Platte River would be allowed to continue."

Comments and Responses

2



United States Department of the Interior
BUREAU OF MINES

P. O. BOX 25086
BUILDING 28, DENVER FEDERAL CENTER
DENVER, COLORADO 80225

Intermountain Field Operations Center

April 6, 1984

Memorandum

To: Area Manager, Platte River Resource Area, U.S. Bureau of Land Management, 951 Rancho Road, Casper, Wyoming 82601

From: Chief, Intermountain Field Operations Center

Subject: Review of draft resource management plan/environmental impact statement for the Platte River Resource Area, Natrona, Converse, Platte, and Goshute Counties, Wyoming (2 Vols.)

Personnel of the Bureau of Mines have reviewed the subject document to determine whether mineral resources and mining operations are considered adequately.

- 1 Mineral resources and mining operations are discussed in detail in the subject document. The preferred management plan appears to be well thought out and fair. In the case of sand and gravel availability, the Bureau believes that alternative 3 rather than alternative 1 would alleviate the apparent shortage of sand and gravel in the Casper area and make more sand and gravel available to other users along the North Platte River between Casper and the Wyoming-Nebraska border. The Bureau, however, has no objection to the preferred management plan as described.

Donald P. Blasko

Donald P. Blasko

Response to Letter 2

1. Thank you for your comment. We appreciate your support.

3A



Soil Conservation Service

Room 3124
100 East 8 Street
Casper, Wyoming 82601

April 6, 1984

Mr. James Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, Wyoming 82601

Dear Mr. Melton:

The Soil Conservation Service has reviewed the draft environmental impact statement for the Platte River Resource Area Resource Management Plan. We have the following comments:

- 1 It is our opinion that Chapter 2, which describes the four alternatives analyzed, should take a more intensive look at the impacts that these alternatives have on soil, water, and air resources. For example, there appears to be no evaluation of what effect any of the alternatives would have on acceleration or reduction of wind and water erosion and resultant potential sediment loading.
- 2 Chapter 2 in its evaluation of "grazing management" fails to address the impacts that various levels of livestock leases would have on improvement or degradation of range site condition, effects on increasing or decreasing erosion, and strategies for increasing range condition on lands that are in poor condition.
- 3 We would also recommend that Chapter 2 include an evaluation of how the various management alternatives would impact on private lands, particularly irrigated farmlands that lie within the Platte River Resource Area. It is our opinion that the management alternative cannot be properly evaluated without considering their impacts on adjacent private lands.
- 4 The section on soil, water, and air in Chapter 3 could be made much more specific to the area by utilizing general soils information available on a county basis rather than the Wyoming General Soil Map. This information and maps for each of the four counties is available from the Soil Conservation Service. We also recommend that Table 3-28 be revised to provide information based on soil associations and not vegetative cover. By doing this, information on soil characteristics, capabilities, limitations, and other soil features can be explained. We recommend that a general soils map be included in this report.

The Soil Conservation Service
is an agency of the
Department of Agriculture

Responses to Letter 3

1. Chapter 2 was designed only to discuss alternatives. Chapter 4, "Environmental Consequences," discusses the impacts of the alternatives. You will find a discussion of the impacts on soil, water, and air resources in that chapter by alternative.
2. Chapter 2 describes different levels of livestock management, or alternatives. It was not intended to address impacts of these alternatives. Some of the impacts you are concerned about are addressed in Chapter 4, "Environmental Consequences." The reasons that the BLM did not consider a broader range in levels of livestock use are discussed on pages 17 and 34 of the draft. The alternatives did discuss various levels of AMP development, range improvement, and land treatment projects designed to improve range conditions and/or production.
3. Grazing actions contained in the preferred management plan were considered relative to adjacent lands, and it was found that these actions would have no significant impact on private land. The management of public rangeland should have little or no impact on private irrigated farm land.
4. When the draft document was prepared, soil boundaries and soil types did not match across the county lines for Natrona, Converse, Platte, and Goshute counties. We agree that more detailed information in the document would be beneficial; however, the Wyoming General Soil Map was all that was available, and we do not feel that presenting more specific detailed maps is critical. When individual projects are proposed, site-specific soil inventories will be used in addition to the information on the county maps.

Comments and Responses

3B

Mr. James Melton, BLM
Page 2
April 6, 1984

5

5) We recommend that Chapter 3, "Affected Environment," have a section on agricultural lands. Because of the significant amount of farmlands--predominantly private--in the Resource Management Area, we feel that any evaluation would be incomplete that does not address the impacts that any management strategy would have on adjacent private farmland.

There are several other minor comments, but those mentioned above are our major concerns. We appreciate the opportunity to review this draft.

Sincerely,

Frank S. Dickson
Frank S. Dickson
State Conservationist

Table 3-28 is based on soil associations as well as vegetative types. The letter and numeric combinations beneath the vegetative type on table 3-28 refer to the soil association on Map 14 in Volume 2 of the draft RMP/EIS. Map 14 provides information on soil associations and a brief description of those associations.

5. Agriculture is discussed on pages 134 through 137 of the draft document. None of the alternatives discussed in the draft would have a significant impact on agricultural land in the resource area. The more important agricultural lands are in Converse, Platte, and Goshen counties, where the amount of public land is insignificant. Most, if not all, adjacent landowners were consulted regarding the plan and its ramifications, particularly regarding minerals, range, lands and realty decisions, and values related to wildlife and cultural resources. Many of these landowners are farmers in the counties mentioned. Our proposed management strategies have not been identified by the public as posing significant effects on private farmland.

Responses to Letter 4

1. The 1973 extensive forest inventory classified the Squaw Mountain area as productive forestland; that is, by the forestry definition it will produce at least 20 cubic feet of material per acre per year. As productive forestland, it is considered a part of the resource area's forest base. (Also see Response 10 to Letter 19.)

Sports enthusiasts and the WGFD (see Letter 19) would like the BLM to acquire access to Squaw Mountain. However, the RMP states that no forestry endeavor will be carried out in the area unless requested for wildlife or recreation activities. At this time, there are no wildlife or recreation priorities for Squaw Mountain. For the next five years we expect to leave the area "as is"; after that we will reevaluate the area. RMU 12 has been changed in the final to reflect your concern.

2. Thank you. We appreciate your support and encouragement.

4

DRAFT PLATTE RIVER RESOURCE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT (RMP/EIS)

WHEATLAND

PLATTE RIVER RESOURCE AREA PUBLIC MEETINGS

PLATTE RIVER RMP/EIS COMMENT SHEET APRIL 1984

Name: (please print) Springer & Donna Jones
Company, Club or Organization (if applicable): Squaw Mountain Cattle Co
Address: Rt 1 Box 4744
City/State/Zip: Wheatland Wyo 82201
Telephone (optional): 329-2238

- ☒ Yes, I have received the Platte River Newsletters.
☐ No, I have not received the Platte River Newsletters.
☒ Yes, I have received the draft Platte River RMP/EIS.
☐ No, I have not received the draft Platte River RMP/EIS.
☒ Yes, Please include me on the RMP mailing list for the final document.
☐ No, I do not wish to receive further information on the Platte RMP.
☐ Our group (agency, organization) would like to have an additional meeting to discuss our concerns. Please contact _____ at Ph-_____ to set a time and date.

Please return by June 21, 1984 to Bureau of Land Management, Platte River Resource Area, 951 Rancho Road, Casper, Wyoming 82601.

How did you learn of this meeting? Radio, TV, Newspaper, a friend, etc.

RMP/EIS

What is your primary reason for participating in this meeting?

Rancher Permit # 6276

THE FOLLOWING ARE MY COMMENTS ON THE DRAFT PLATTE RIVER RMP/EIS. (Use the back of this comment sheet if necessary.)

[Typed reproduction of handwritten comment on comment sheet (letter 4)]

- 1 ☒ We disagree that Squaw Mountain could be productive Forest Land. The area is extremely rough & rocky and would be very difficult to harvest without roads & surface damage that would destroy the beauty of the area. Squaw Mountain is unique in that there are no roads of any kind to give any mechanized access. It is a small area of pure wilderness and should strongly be considered leaving and preserving as is.
- 2 ☒ We would complement the team of the draft. The document shows an immense amount of thought and work. On our lease we feel that we have received all consideration of our views.

Comments and Responses

5

DRAFT PLATTE RIVER RESOURCE MANAGEMENT
PLAN/ENVIRONMENTAL IMPACT STATEMENT (RMP/EIS) CASPER

PLATTE RIVER RESOURCE AREA
PUBLIC MEETINGS

PLATTE RIVER RMP/EIS COMMENT SHEET
APRIL 1984

Name: (please print) W. L. Stearns

Company, Club or Organization (if applicable): _____

Address: 730 Divine Ave.

City/State/Zip: Casper, Wyo. 82601

Telephone (optional): 235-5635 (Home), 235-3511 (Business)

☒ Yes, I have received the Platte River Newsletters. MARCH, 1984, ONLY

☒ No, I have not received the Platte River Newsletters. SEE ABOVE - Would like to be on mailing list.

☐ Yes, I have received the draft Platte River RMP/EIS.

☒ No, I have not received the draft Platte River RMP/EIS.

☒ Yes, Please include me on the RMP-mailing list for the final document.

☐ No, I do not wish to receive further information on the Platte RMP.

☐ Our group (agency, organization) would like to have an additional meeting to discuss our concerns. Please contact _____ at Ph-_____ to set a time and date.

Please return by June 21, 1984 to Bureau of Land Management, Platte River Resource Area, 951 Rancho Road, Casper, Wyoming 82601.

How did you learn of this meeting? Radio, TV, Newspaper, a friend, etc.

What is your primary reason for participating in this meeting? My family's ranching unit leases about two sections of BLM land in the east end of the Bates Hole RMP (carried in the name of Donald Johnson d/b/s Rimrock Livestock). THE FOLLOWING ARE MY COMMENTS ON THE DRAFT PLATTE RIVER RMP/EIS. (Use the back of this comment sheet if necessary.)

1 I have no particular comments on the plan or impact statement. As mentioned above, my family has a ranching unit consisting of deeded, state, BLM and Forest Service lands, which is leased to Donald Johnson d/b/s Rimrock Livestock. The BLM land is in Sec's. 4, 7 and 16, T29N, R7W, Netrons & Converse Counties. If any of this land is offered for sale, I would appreciate being informed.

Response to Letter 5

1. Lot 5 of Section 4, T. 29 N., R. 77 W., has been identified for potential disposal. However, this parcel lies within the Bates Hole RMU and would be disposed of only by exchange or to meet important recreational, educational, or major public purposes through an application by state or county government offices. You would be contacted if such application should be made.

Under our policy, all parties affected by a land disposal action are notified of the action and afforded an opportunity to submit comments or objections. This notification occurs by publication of a Notice of Realty Action or similar notice. In addition, the regulations in 43 CFR 4110.4-2(b) require that a grazing lessee be given a two year advance notice prior to the disposal action unless the lessee waives the two-year notice or the lands are needed for a national emergency. Further, it is common practice in the PRRA to notify any affected party at the earliest possible point in the disposal process.

6

DRAFT PLATTE RIVER RESOURCE MANAGEMENT
PLAN/ENVIRONMENTAL IMPACT STATEMENT (RMP/EIS) CASPER

PLATTE RIVER RESOURCE AREA
PUBLIC MEETINGS

PLATTE RIVER RMP/EIS COMMENT SHEET
APRIL 1984

Name: (please print) Brian Spradling

Company, Club or Organization (if applicable): Trapper Route Paddlers

Address: 6111 Baderville Rt. Box 2

City/State/Zip: Casper, Wyo. 82604

Telephone (optional): 472-5076

☒ Yes, I have received the Platte River Newsletters.

☐ No, I have not received the Platte River Newsletters.

☒ Yes, I have received the draft Platte River RMP/EIS.

☐ No, I have not received the draft Platte River RMP/EIS.

☒ Yes, Please include me on the RMP-mailing list for the final document.

☐ No, I do not wish to receive further information on the Platte RMP.

☐ Our group (agency, organization) would like to have an additional meeting to discuss our concerns. Please contact _____ at Ph-_____ to set a time and date.

Please return by June 21, 1984 to Bureau of Land Management, Platte River Resource Area, 951 Rancho Road, Casper, Wyoming 82601.

How did you learn of this meeting? Radio, TV, Newspaper, a friend, etc.
From Ray Strop - BLM

(Typed copy of questions and responses from bottom of comment sheet.)

What is your primary reason for participating in this meeting?

To see how the management of PRRA is going to work, and to hear public comment from other people.

THE FOLLOWING ARE MY COMMENTS ON THE DRAFT PLATTE RIVER RMP/EIS. (Use the back of this comment sheet if necessary.)

1 I must say that you have compiled an impressive volume of facts and statistics. I don't really know that much about the problem of minerals, ranching and timber concerns, but from what I can see, all interests have been given due consideration. I would say, "Keep up the good work."

Response to Letter 6

1. Thank you. We appreciate your support and encouragement.

Comments and Responses

Response to Letter 7

1. Thank you for your support and encouragement. Public involvement continues to be an important part of the RMP/EIS process.

Responses to Letter 8

1. You are correct in assuming that we did not receive the list of land parcels before this letter arrived. This list will be retained and used where possible in case-by-case evaluations of parcels for disposal. Thank you for your comment.
2. The criteria developed for land disposals (appendix A, page 298, Draft RMP/EIS) preclude disposal of public lands that contain significant wildlife, recreation, or other resource values. Lands containing elk habitat have been removed from the disposal category "across the board." Many parcels with deer, antelope, sage grouse, and other high interest species have also been removed from the disposal category. However, some public lands containing these and other species are still identified for disposal and will be considered case by case in more detail. This occurs once we initiate parcel analysis in the process when funding and work force capability permit land disposal activity on a year-to-year basis.

Legal access or the lack thereof was not used as a criterion for disposal. Small isolated parcels with legal access may be as difficult and uneconomic to manage as those without legal access, and the public use value may range from negligible to substantial. Also, legal access can be of substantial benefit in the case of R&PP or other public purpose disposals. Again, case by case analysis will provide a better basis for making a decision regarding disposal or retention.

Several parcels have been removed from the disposal category because of adjoining state lands or other federal lands. This is mostly true where a public land parcel adjoins a large parcel of state land. However, some

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DRAFT PLATTE RIVER RESOURCE MANAGEMENT
PLAN/ENVIRONMENTAL IMPACT STATEMENT (RMP/EIS) CASPER

PLATTE RIVER RESOURCE AREA
PUBLIC MEETINGS

PLATTE RIVER RMP/EIS COMMENT SHEET
APRIL 1984

Name: (please print) Lyle Reber

Company, Club or Organization (if applicable):

Address: 1745 Lynwood

City/State/Zip: Casper, WY 82604

Telephone (optional): 237-9652

☐ Yes, I have received the Platte River Newsletters.

☒ No, I have not received the Platte River Newsletters.

☐ Yes, I have received the draft Platte River RMP/EIS.

☒ No, I have not received the draft Platte River RMP/EIS.

☒ Yes, Please include me on the RMP mailing list for the final document.

☐ No, I do not wish to receive further information on the Platte RMP.

☐ Our group (agency, organization) would like to have an additional meeting to discuss our concerns. Please contact _____ at _____ to set a time and date.

Please return by June 21, 1984 to Bureau of Land Management, Platte River Resource Area, 951 Rancho Road, Casper, Wyoming 82601.

How did you learn of this meeting? Radio, TV, Newspaper, a friend, etc.
Friend and radio.

What is your primary reason for participating in this meeting?
Cultural and mineral interests.

THE FOLLOWING ARE MY COMMENTS ON THE DRAFT PLATTE RIVER RMP/EIS. (Use the back of this comment sheet if necessary.)

1 I appreciate what the Bureau of Land Management is attempting to accomplish in regard to BLM lands in this resource area. I especially appreciate the opportunity you afford the public for commenting and having input into this important issue.

8A

THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Game and Fish Department

CHEYENNE, WYOMING 82002

W DONALD DEXTER
DIRECTOR

P.O. Box 1264
Wheatland, WY.
April 24, 1984

Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, WY.

Dear Mr. Melton:

1 Enclosed is the list of land parcels I mentioned to you the night of the PRM RMP/EIS meeting in Wheatland. This list was compiled when we first began hearing that the BLM would actively embark on a land disposal program. The list was sent up the ladder in our agency with the intent that a copy of it would eventually be sent to each of the BLM offices associated with this corner of the state. Apparently this did not happen.

2 Lands identified in this list were selected for the following criteria (right-hand column of the list):

1. public access
2. important to wildlife
3. a portion of a substantial amount of public land (including lands administered by other government agencies).

The lands listed here are within my area of responsibility, so some of them are west of the PRM boundary in the area for which the Rawlins BLM office is responsible. There is no easy way to separate the lands in your Resource Area, so I have included the entire list.

Obviously, the importance of each parcel varies according to the degree to which they fit each of the criteria they were selected by and according to the number of criteria they fulfill. I have not attempted to prioritize them based on their individual importance. Rather, I feel that the fact that a parcel is listed is reason enough to seriously consider it for retention.

3 In closing I would like to state that public land in Platte and Goshute Counties, particularly that with legal public access at present, is precious, and its use is continuously increasing. I urge you to hold on to anything that provides recreational use and to put more effort toward getting access to reasonably large blocks that at present are not accessible to the public. Once this land is gone, it's gone forever. This corner of the state has limited recreational opportunities and one of the largest population segments. Recreational demands will continue to in-

Comments and Responses

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- 3 crease, creating congestion and other problems on what little accessible public land there is.
- 4 Although it is a headache for your agency, land trades to gain access to isolated blocks are strongly recommended. Purchasing easements should also have a high priority. Without a sincere effort to accommodate future recreational demands, agencies such as ours are not only short-changing the public, but we are leaving ourselves open to serious future management problems on those lands that are available to recreationists.
- Please contact me if I can be of any help to you.

Sincerely,

Reg. Rothwell
Reg. Rothwell
District Biologist

cc: D. Mobley, H. Harju

[The letter also included a 73-page list of parcels by legal description. The list, which is mentioned in the first paragraph of the letter, was entitled "BLM Lands Recommended for Retention." Because of space considerations and printing costs, it has not been reprinted here, but it is on file at the PRRA office in Casper.]

parcels of public land that adjoin smaller state parcels are still identified for disposal and will be considered further case by case. The use of case-by-case analysis and input from federal, state, and local government agencies should reduce or eliminate from disposal of any parcels that contain important resource values.

3. An easement to the Upper Laramie River and one to Squaw Mountain were identified in Alternative 1. In the preferred management plan, the Squaw Mountain easement would be dropped because an elk herd is present that could be disturbed and because no management plan for the area is proposed. Providing public access to an area without adequate management can result in many of the problems we are trying to resolve, including trespassing, vandalism, littering, road damage, and soil erosion.

Acquisition of an easement to the upper Laramie River will still be pursued. However, that easement will have a low priority. Also see Response 1 to Letter 35.

4. As you indicate, in many cases an exchange is neither practical nor in the public interest for acquiring access. In accordance with Section 206 of the Federal Land Policy and Management Act, an exchange must improve federal land management opportunities before it can be considered. Exchanges on many of the disposal parcels would only serve to "block up" small parcels by exchanging one isolated parcel for another. The costs of processing such exchanges would far exceed the public benefits (if any) that might be realized.

We have evaluated many access needs and have proposed access in areas that have the best potential for accommodating recreation demand. Many of the identified parcels are used seldom, if at all, by the public. The value for public recreation on these inaccessible parcels is minimal. Exchanges are discussed further in Response 8 to Letter 31.

Comments and Responses

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LETTER 9 (Oral Comment)

1 How will the proposed fire management program effect fire suppression on the Casper and Muddy Mountains and the Sand Dune area? Percy Cooper and Jon Nicolaysen (Casper Public Meeting April 26, 1984)

Response to Letter 9

1. Of the 12,000 acres identified as meeting the size criteria and low resource value/risk criteria for proposed limited suppression on Casper Mountain and Muddy Mountain, less than 4,000 acres lie north of Circle Drive, on the western edge of Casper Mountain.

Most of the area of "blocked" BLM lands and intermingled state lands is accessible, and response time from fire crews based in Casper and the county crews stationed on the mountain would be relatively prompt. However, the BLM does consider the nature of the fuels and terrain in portions of this area to be suitable for limited suppression actions. Areas surrounded by natural barriers, steep, rocky slopes, sparse fuels, and potentially hazardous working conditions for firefighting personnel are examples of why the BLM feels limited suppression is a viable consideration for portions of this RMU on or near Casper Mountain. Other areas within the RMU considered for limited suppression include public lands in the Sheep Creek and Corral Creek drainages. Due consideration will be given to private land or structures close to limited suppression zones.

Limited suppression on the Casper Sand Dunes was considered to be a management benefit because (a) it is a large area of public land on which the only primary resource value is grazing; (b) with a limited suppression designation, BLM could prohibit the use of earthmoving equipment or other surface-disturbing machinery used for fireline construction where the soil and vegetation are extremely susceptible to erosion once disturbed; (c) if wildfire started it could be contained and eventually controlled with a minimal amount of personnel and expense, since the stringent requirements of fire control under current fire suppression policies would be modified; and (d) the "flashy" nature of grassland fuels in the Sand Dunes usually makes fires difficult to contain promptly, whereas if the the crews were allowed to wait until extreme burning conditions had been modified by time of day or weather elements, the fire would then be easier to contain and control.

Because of the concern for loss of forage and the greater potential for soil loss on larger sized wildfires, consideration will be given to lessening the fire size normally expected as a result of limited fire suppression actions within the Casper Sand Dunes RMU.

Comments and Responses

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April 24, 1984

U.S. Department of Housing and Urban Development
Denver Regional Office, Region VIII
Executive Tower
1405 Curtis Street
Denver, Colorado 80202

Mr. Jim Melton
Area Manager, B.L.M.
Platte River Resource Area
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement for the Platte River Resource Area, Natrona, Converse, Platte and Goshen Counties, Wyoming.

- 1 Your draft has been reviewed with specific consideration for the areas of responsibility assigned to the United States Department of Housing and Urban Development. This review considered the proposal's compatibility with local and regional comprehensive planning and impacts on urbanized areas. Within these parameters, we find this document adequate for our purposes.

If you have any questions regarding these comments, please contact Mr. Howard Kutzer of my staff, at (303) 837-3102.

Sincerely,

Robert J. Matuschek
Robert J. Matuschek
Director
Office of Community Planning
and Development, BC

Response to Letter 10

1. Thank you for your comment. We appreciate your support.

11A



E. Fred Birrell
Public Lands Coordinator

Conoco Inc.
555 17th Street
Denver, CO 80202
(303) 311-1821

May 29, 1984

Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

Re: Draft RMP/EIS Platte River Resource Area

- 1 The plan states, and our operating experience is, that restrictions to oil and gas operations are treated on a case-by-case basis with discretionary latitude at a local level. Restrictions can generally be waived if potential impacts can be acceptably mitigated. Our concerns with the Platte River RMP constraints are largely that the levels of protection, though not generally invoked, are unrealistic.
- 2 For example, we find Constraint SWA 2, prohibiting development within 200 feet of intermittent and ephemeral streams, as having potential to virtually foreclose the entire RA, dependent on rainfall. Or Constraint WL 7, protecting hawk nesting sites, when there is no shortage of hawks in Wyoming. (Especially conspicuous excess is Conclusion #11, South Big Horn EA (p. 345) disallowing surface occupancy within 1 1/2 miles of any raptor nesting!) Or WL 9, disallowing development of potential black-footed ferret habitat when it is our understanding that the only ferret sightings have been in already-developed areas. Or the no-development zone within 1/2 mile of the Platte River when that zone contains highways, railroads, cities and towns, and other abundant current development. Again, we note your (p. 62) statement: "Blanket application of the stipulations does not occur." That indeed has been our experience. However, if the RMP provides the legal opportunity to apply blanket restrictions, reasonable management could be compromised, both on federal and split-estate acreage.

- 3 There is, I believe, an error of fact on p. 62, Leasing, stating that "The BLM would lease in those areas only on approval from the surface managing agencies." This statement is true for acquired lands. However, public domain Forest, for example, does not require consent. The Forest Service only recommends, and the BLM is not bound to honor that recommendation.

- 4 Although you explain that oil and gas development and the constraints on that industry were not an issue in the RMP, nonetheless oil and gas are thoughtfully considered throughout the text. (You cite (p. 1) that only 27,000 acres of the PRRA are withdrawn. However, the impacts of several of your other issues can substantially erode the ability to develop for oil and gas. Married to the other issues, oil and gas inextricably becomes an issue. For example, cultural resource protection could swing between 2327 and 4725 acres, withdrawal swing from

Responses to Letter 11

1. We disagree that the planning decisions are unrealistic. Most of the decisions in this resource area have been in effect for several years. As you have pointed out, they are generally applied case by case, and development is usually not denied. We agree impacts are usually mitigated. To our knowledge, no drilling operation in this resource area has been denied because of surface protection measures. A total of 12,000 acres (out of the 1.4 million acres of federal surface administered) are not leasable, and lands on these areas cannot be drilled. This is less than 1% of the land in the resource area. The lands have been identified early to avoid holding up drilling applications.
2. We partially agree with your comment on SWA-2. The statement as written may be misleading. Therefore, we have added the following statement to the SWA section in appendix B:

An ephemeral stream is defined as a stream or reach of stream that flows briefly only in direct response to the precipitation in the immediate locality and whose channel is at all times above the water table. This stipulation is applied to intermittent streams and well-defined ephemeral streams where watershed conditions indicate that the potential exists for the stream to carry sufficient quantities of water to result in damage to dike channel. This decision is applied case by case and does not apply to every depression in topography or every conceivable drainage that might carry runoff at some time; rather, it applies to key drainage areas that have the potential to affect live streams.

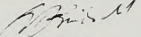
Comments and Responses

11B

Mr. Jim Melton, Area Manager
Page 2
May 29, 1984

- 4 10,500 acres to 38,800 acres; recreation management from 12,733 acres to 47,480 acres between alternatives with oil and gas development restricted or denied accordingly. Because (1) withdrawals, (2) no surface occupancy, and (3) restricted occupancy each add incremental toll to an adverse effect on oil and gas development possibilities, RMOGA suggested to the PRRA RMP team that a matrix analysis of the effect of these changing access restrictions vs. the oil and gas geologic potential would provide useful comparative indices. You have the raw data (geologic potential in Map 5 and affected acreages in different alternatives) to perform such a matrix analysis, and we urge you again to consider this process.
- 5 In your summary comparison, you state that 6,644,090 acres are available subject to constraints and mitigation. The constraints and mitigation vary between alternatives, however, and the proposed RMOGA matrix analysis would illustrate the effect of that variation in constraints and mitigation.
- 6 Because, as Map 5 adequately illustrates, the PRRA has a high level of petroleum occurrence, we are anxious that restrictions on oil and gas development do not unwarrantedly inhibit development of this excellent petroleum potential. We appreciate that the bulk of the PRRA is available for standard leasing and development. We hope to see a final management plan which will provide continued opportunity, especially in the areas of high geologic potential. Absent an analysis that these high potential areas are indeed open, we are not in a position to express a preference for one alternative over another.
- 7 This RMP/EIS is a high quality document, and we hope that other Wyoming RMP's will meet the standards this pilot document has set.

Yours very truly,


E. Fred Birdsall

bp

cc: Jim Taylor
W. Frueauf
A. Frell

We do not agree with your comment on WL-7. The decision is specific to federal high interest species and state high interest species. The BLM is required by law (the Endangered Species Act of 1973 and the Migratory Bird Treaty Act) to protect species in those categories. High interest species defined by the Wyoming Game and Fish Department are included in the spirit of cooperation. Only hawks (and other raptors) that have been identified by the Wyoming Game and Fish Department as sensitive species or by the U. S. Fish and Wildlife Service as species of high federal interest are protected by WL-7. The protection covers the bald eagle and peregrine falcon, which are endangered, merlin and burrowing owl, which are uncommon in the state, and the remaining six species, which are listed as common in Wyoming but are limited in distribution elsewhere. Two of these six species, ferruginous hawk and Swainson's hawk, were identified by the U. S. Fish and Wildlife Service as under study for possible listing as threatened species.

All these raptors are protected by federal or state law, and there is a biological need to ensure their nesting ability. It is our experience that a seasonal restriction on activities near high interest raptor nests provides the biologic protection needed for nesting while still allowing development to take place.

We agree with your comment on conclusion no. 11 of the South Big Horns EA regarding actions near raptor nests. It has been deleted and replaced by WL-7 (appendix B).

We disagree with your comment on WL-9. This stipulation does not prohibit development of potential black-footed ferret habitat. Instead, the stipulation requires that a search be conducted first, and then consultation would be initiated if any evidence of ferrets was found. These precautions are necessary for the BLM to meet its commitment in managing endangered species habitat. Development can take place after searches are completed in prairie dog towns if no ferret evidence is found. If evidence of ferrets is found, the impact from a proposed development can be mitigated. Most ferret sightings have not been in developed areas; only 3 of 19 ferret sightings in the PRRA have been near developed areas (see Clark's 1977 report as referenced in the draft RMP/EIS).

Surface occupancy has been denied within ¼ mile of the North Platte River for several years without the development of oil and gas being hampered. The ¼-mile limitation is within the recognized drainage area of most wells and is a standard buffer on major rivers throughout the state. The application of this decision is needed to protect riparian zones, watershed values, wildlife habitat, and aesthetic and recreation values on and adjacent to the North Platte River. We disagree that the RMP provides a legal basis to compromise reasonable or logical management decisions.

3. You are correct. We have changed the wording to the following:

The BLM generally leases federal land administered by other federal agencies upon approval from the surface managing agency. However, the Secretary of the Interior may override the decision of the surface managing agency. BLM field offices and other surface managing agencies make leasing recommendations to the BLM State Office, which does the actual leasing. Only in the case of land acquired (purchased) by a federal agency can that agency deny leasing.

Comments and Responses

4. We agree with the future potential for use of the matrix analysis. We look forward to working with you on the project. With the information that companies provided for the matrix, we defined potential and made an analysis comparing the potential ratings against the land use decisions in the RMP. The comparison indicates that the decisions in the RMP do not restrict access in most cases. Further attempts will be made to use the system when more complete data and time are available for both of us. The BLM will plan to meet with industry representatives and RMOGA for a work session on the use of the matrix.

We agree that oil and gas concerns are discussed throughout the RMP. Of the 27,000 acres closed to oil and gas leasing in the PRRA, 15,700 acres are withdrawn and the remaining 11,300 are closed by various decisions. Of the 15,700 acres withdrawn, 9,500 acres are within the Naval Petroleum Reserve No. 3 and will remain closed to oil and gas leasing; 400 acres are within the Fort Laramie National Historic Site and will remain closed to leasing; and 5,800 acres are within the Camp Guernsey Target and Maneuvering Area, which may be opened to oil and gas leasing subject to a "no surface occupancy" stipulation on the entire area. The final decision on Camp Guernsey has not been made; however, this is the proposal that has been submitted to the Secretary of the Interior.

The proposed withdrawals range from 0 to 38,800 acres by alternative. The withdrawals would only segregate these lands from operation of the mining laws. Oil and gas leasing can continue subject to the standard leasing stipulations (appendix C) and the land use planning decisions contained in appendix B.

5. See Response 4, above. We agree that it is possible that available acreage could become unavailable through application of various constraints. The possibility is remote that industry might not be able to develop a lease because the BLM applies land use decisions and requires additional mitigation. To our knowledge that situation has never occurred in the PRRA.
6. Areas in the PRRA rated as having high potential for oil and gas have the fewest restrictions. In much of the area there are no planning restrictions.
7. Thank you for your comment. We appreciate your support.

Comments and Responses

12



United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

MEMORANDUM

TO: Jim Melton, Area Manager, Platte River Resource Area,
Wyoming, Bureau of Land Management

FROM: ~~for~~ Mei Shilling, Chief, Mining Analysis Division, Western Technical
Center, Office of Surface Mining Reclamation and Enforcement
(OSM) *Handwritten signature*

SUBJECT: Platte River Resource Area Resource Management Plan
(RMP)/Environmental Impact Statement (EIS)

1 We have reviewed the draft EIS for the Platte River Resource Area RMP and have found that it addresses all of OSM's concerns for this area. We have no suggestions for improvement.

We appreciate this opportunity to participate in the review of the document and look forward to seeing the final EIS.

Response to Letter 12

1. Thank you for your comment. We appreciate your support.

13



Chevron USA Inc.
700 South Colorado Blvd., P. O. Box 599, Denver, CO 80201

Richard T. Hughes
Staff Analyst
Legislative and Regulatory Affairs

June 5, 1984

Draft RMP/EIS
Platte River RA

Mr. Jim Melton
Bureau of Land Management
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

1 Having reviewed the Draft RMP/EIS for the Platte River RA, I believe you and your staff should be commended for a job well done in planning for the wide variety of resources which exist in your part of Wyoming. I was particularly pleased to see the Plan's recognition of the relative petroleum potential of various RMUs. In fact, this is the first BLN Plan in which I have seen petroleum potential play any role in the unit-by-unit analysis. This type of analysis recognizes petroleum as the valuable resource it really is, and I hope the Bureau can adopt this type of analysis in all of its Plans.

Sincerely,

RTM:hh

Response to Letter 13

1. Thank you for your comment. We appreciate your support.

Comments and Responses

14A



PETROLEUM ASSOCIATION OF WYOMING

A DIVISION OF RMOGA

Executive Director
Richard T. Robitaille

330 South Center, Suite 115
Casper, Wyoming 82601
307-234-5333

Associate Director
Wendy H. Frueauf

June 8, 1984

Mr. Jim Melton
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, Wyoming 82601

Dear Mr. Melton:

Re: Draft RMP/EIS Platte River Resource Area

On behalf of the Petroleum Association of Wyoming (PAW), a division of the Rocky Mountain Oil and Gas Association, whose members account for more than 90% of the petroleum produced and 90% of the wells drilled in Wyoming, please accept the following comments on the Draft Resource Management Plan for the Platte River Resource Area.

- 1** The "Energy and Minerals" section of Chapter Three contains a variety of statistical information relating to oil and gas activities in the resource area. Most of the information is provided only through 1981, and could be updated through 1982 and in some cases through 1983 utilizing the same sources. We suggest that the most recent data available be incorporated into the final plan to assure that the RMP is as accurate and complete a document as possible to serve the area for the next decade. This section and the overall analysis of oil and gas activities are appropriate and necessary components of the RMP in light of the magnitude of this land use in the resource area.
- 2** The standard stipulations that may be applied to oil and gas leases in Wyoming and certain mitigating measures that may apply in specific areas are referenced in Appendices C and G. We urge the BLM to examine all stipulations to determine if they are both necessary and justifiable. Certain stipulations may not be adequately supported with data to meet this test. For example, prohibiting development within 200 feet of intermittent and ephemeral streams could conceivably apply to nearly the entire resource area during certain times of the year.
- 3** Although oil and gas development and the constraints on the industry are not issues in the RMP, oil and gas is included in the analysis as a minerals management program. The effects of the alternatives on access to the oil and gas resource could be more clearly defined. The summary comparison of alternatives indicates that 4,644,090 acres are available for oil and gas development subject to program constraints and mitigation, yet these measures, such

Responses to Letter 14

1. We agree with your comment. The updated information has been incorporated into the text and in tables 3-3 and 3-4 of the final RMP/EIS.
2. We have reviewed the planning decisions in appendix B and the standard stipulations in appendixes C and G, and we have clarified or changed them where necessary. (Also see Response 2 to Letter 11.)
3. We agree that a comparison of access restrictions to the geologic potential in a given area would be advantageous and useful. We would hope to complete and use the matrix system proposed by RMOGA, but the system has not been completed or fully incorporated in the final RMP/EIS. (Also see Response 4 to Letter 11.)
4. We do not intend to hamper oil and gas development in the resource area with unnecessary or unjustifiable planning decisions or stipulations. We do support, as your letter suggests, "a management plan which provides continued opportunity for minerals development to the greatest extent possible." (Also see Response 1 to Letter 11.)

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PETROLEUM ASSOCIATION OF WYOMING

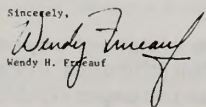
A DIVISION OF RMOGA

Page 2
June 8, 1984

330 South Center, Suite 115
Casper, Wyoming 82601

- 3** as cultural resource protection and recreation management vary by alternative. Comparison of these access restrictions to the geologic potential of a given area would provide useful data for future land use management decisions.
- 4** Generally, we believe that the draft document adequately recognizes and addresses oil and gas exploration and development potential. We encourage the resource area to pursue a management plan which provides continued opportunity for minerals development to the greatest extent possible invoking only necessary and justifiable stipulations.

Thank you for the opportunity to comment.

Sincerely,

Wendy H. Frueauf

15A

Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, Wyoming 82601

Eldon L. Allison, Jr.
3755 Gary Ave.
Casper, Wyoming 82609
June 10, 1984

I wish to submit the following comments on the Draft EIS for the Platte River Resource Area RMP:

- 1 There are several problems with the Draft EIS, most of which won't be addressed due to the fact that I have no desire to put together the 40 or 50 page critique which it deserves, and the fact that I'm sure you'll go ahead and do what you want no matter what I say anyway. The most basic problem is a conceptual one. I get tired hearing about the "public resources," "resource considerations," how "adequate resource protection allows full use of resources," etc. You also constantly try to lead people by using words such as "sensitive" and "fragile" to describe various areas. No one can have any idea what these areas consist of since use of these terms are emotional pleas which convey no information at all. By your own admission you have no data on which to base such conclusions. Mineral or "surface development" is generally conveyed as the principal cause of all environmental problems from poaching game to polluting the entire area. Of course ranchers, hikers, "good 'ole boys," etc. don't ever have anything to do with all of this. Minerals is not even recognized as a public resource until p. 210 where someone admits that various recreation proposals might be "sufficiently large to restrict the industry's ability to extract the resource through development ..."
- 2 Supposedly the impacts to the mineral resource will remain the same throughout all of the alternatives discussed. Any fool can see that if you commit 36,347 acres to recreation (p. 210), or decide to dispose of 102,700 acres, or withdraw 38,800 acres (p. 145), etc., there is an impact to a potential mineral resource by denying access to it. You have not given any consideration whatsoever to the potential loss of a mineral resource in your discussion of the various alternatives. With the one exception noted previously "minerals" are not even considered to be a public resource, "public resources" seem to consist of everything except minerals.

Responses to Letter 15

1. The terms "sensitive" and "fragile" are not used for informational purposes. They define specific characteristics according to guidelines in the BLM's watershed manual.

Surface development is the major reason for both positive and negative environmental effects in the PRRA. Development is not confined to the mineral industry; it includes development stemming from a variety of land uses. We recognize that impacts are not solely associated with the minerals industry and have not concluded that in this EIS. The BLM fully recognizes that public mineral resources (especially the energy minerals) in the PRRA are vital to the economic well being locally, regionally, and nationally. We believe that importance has been recognized and emphasized on pages 61 through 71 and in tables 3-41 and 3-42 in the draft EIS.

2. We disagree that the impacts to mineral resources have not been considered. We suggest you read pages 150, 151, 173, 179, 181, 182, 184, and 186 (consequences of Alternative 1); pages 188, 189, 193 and 196 (consequences of Alternative 2); pages 197, 198, 201, 202, 204, and 205 (consequences of Alternative 3) and pages 206, and 211 (consequences of Alternative 4).

You have used as examples the maximum figures from Alternative 4 for recreation and withdrawals. Neither was selected in the preferred management plan. The 36,347 acres committed to recreation falls under alternative 4, "High Level Management." The actual acreage for recreation use that is preferred in Alternative No. 3 is 18,000 acres, and oil and gas potential is high in 1,400 acres of this area (p. 202). About 10,500 acres would be withdrawn (Alt. 3) in the preferred management plan. This is a reduction of 28,300 acres from the acreage contained in Alternative 1. See table 2-1 on page 22 (item 7) for a comparison.

We disagree that disposal of 102,700 acres means that access to those lands would be denied to the mineral industry. Disposal actions reserve the mineral estate to the United States unless the mineral report indicates the land has no mineral values. The mineral industry has generally operated very well in Wyoming on private surface and we expect that to continue. We recognize that creation of additional split estate may increase cost to the industry.

3. The impacts of right-of-way construction (access roads, water control structures, irrigation ditches, canals, etc.) are discussed on pages 172-173 of the draft. In addition to the analysis provided in the document, most lands program actions (R&PPs, sales, exchanges, rights-of-way, withdrawals) require separate environmental analyses to determine site-specific impacts.

We have evaluated the effects of resource management alternatives on mineral exploration and development. We agree that past evaluations regarding potential have been less than desirable, especially in respect to oil and gas resources; however, the BLM has relied heavily on the mineral industry for that information. Such information is often confidential, is protected, or is not available, especially in respect to prospective areas. The industry has been most helpful in supplying much of the oil and gas and other mineral information for this document. That information was used as described on page 65 of the draft EIS, and oil and gas potential was defined on map no. 5 (Volume 2, draft RMP/EIS).

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- 3 Mineral development causes "surface disturbance," but what about fence-building, construction of various types of watering facilities, access roads, timber harvesting, water control structures (settling ponds, dams, etc.), chemical spraying, construction of irrigation ditches and canals, etc., etc. I guess that since these things don't involve minerals they don't qualify as being "surface disturbance." Maybe one of these years you'll figure out that management of any resource necessitates various manners and degrees of "surface disturbance." In addition to the rest of your baloney you have the nerve to tell people that "it is important to note that oil and gas development is constrained by valid land management decisions developed through public input and prior planning (p. 62)." Also, through various EA's you have evaluated land use decisions that constrain oil and gas development. You have never attempted to evaluate the impacts of your decisions on mineral exploration activity. Your RMP lists several existing or proposed recreation, wildlife, grazing, watershed, and timber management plans or study proposals. Compare this to the data for minerals used to evaluate withdrawals, sales, the above listed management plans, etc. Potential mineral resources which may be present are being given no consideration at all, the same as in your past EAs and management plans.

Contrary to what many people think, NEPA does not say that all natural resources should be protected at all costs. NEPA recognizes the interrelation between the natural environment and the need for resource exploitation. It advises all Federal agencies to utilize a systematic interdisciplinary approach which will insure integrated use of natural, environmental, and social sciences. These same Federal agencies are to study, develop, and prescribe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.

FLPMA reaffirms the same basic constraints imposed by NEPA. FLPMA requires that public land management will be based on multiple use and sustained yield unless otherwise specified by law (i.e. Threatened and Endangered Species Act). The public lands are to be managed in such a way that the nation's need for domestic sources of minerals, food, timber, and fiber from the public lands be recognized. The development and revision of such land use plans shall use

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a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences. The principal intent of FLMPA, like that of NEPA, is to achieve a balance between environmental concerns and resource utilization and development.

4 You have defined the purpose of an RMP as "issue resolution" where an issue is "an opportunity, conflict, or problem regarding use or management of the public lands and resources (p. 293)." There are several things in the document itself which do not support the above statement. As stated earlier, you indicate that mineral development is constrained by valid land management decisions developed through public input. I am personally aware of several individuals who made a personal request that some of the decisions affecting access to the public lands for mineral exploration purposes be reconsidered. Your statement that these constraints are not an issue is a pure and simple lie (p. 164). The request has obviously been ignored and as mentioned earlier any fool could see that mineral resource considerations are not even close to being given equal status with other resources associated with the public lands. When I see statements like "this alternative would accomplish the primary goal of protecting soil and water resources (p. 164)," and Salt Creek "... is an excellent example of what can happen from past oil development that was subjected to little or no environmental control (p. 159)," it becomes obvious that you are not honoring the spirit of the applicable laws, nor your own stated purpose for completion of an RMP.

5 In one place you state that "the effects of oil and gas development on cultural resources is beneficial in most cases because regulations require inventory of all drilling sites prior to surface development (p. 154)." Later (p. 191, etc.) you indicate that to prohibit surface development would promote preservation of cultural resources. My guess is that the person who knows what they're talking about, the archeologist, wrote the first statement, and someone who doesn't know what they're talking about wrote the second and subsequent statements. In another part you indicate that timber harvesting, which involves building roads, etc., damages the surface vegetation (p. 167) on 13,900 acres under your preferred alternative, but oil and gas activity destroys habitat (p. 161) amounting to 12,750 acres over a ten year period.

4. Oil and gas resources were considered in the RMP staff scoping and brought out for public comment in the public meetings and newsletter. No issue relating to oil and gas resources was identified. Nevertheless, thorough treatment of this resource was provided throughout the RMP. All the decisions affecting access to the public lands for mineral exploration were reconsidered in the RMP, and some were changed, some dropped, and some retained.

5. The statements on pages 154 and 181 of the draft, when taken out of context, may appear to be contradictory. The first is intended to show that *some* benefits are derived from most oil and gas projects, not that these are the maximum benefits. The second is a statement of fact: that prohibition of surface development promotes preservation of cultural resources.

About 34,000 acres in the preferred alternative would be subjected to intensive forest management, not 13,900 acres. It is estimated that about 250 acres per year would be harvested (page 207). Timber harvesting does destroy vegetation because roads and skid trails are built, as is mentioned on page 167 of the draft. The remaining vegetation in the harvest area (excluding harvested trees) is damaged but not destroyed. (The impacts on wildlife and their habitat from timber harvest are discussed on page 168 of the draft.) Conversely, development of oil and gas well sites does destroy a given amount of vegetation for the life of the well. That vegetation, and thus the habitat, is committed for the life of the well if it is a producer.

There is no reference to sand and gravel operations destroying 800 acres of native rangeland in the EIS. The sum total of surface disturbance from *other mineral activity* (excluding oil and gas) is about 700 acres per year (page 156). The term "native rangeland" is not used in association with sand and gravel operations. The EIS merely points out the number of acres affected by sand and gravel operations.

6. One reason that oil and gas activities on Pine Mountain probably did not disturb bald eagles is that only a few bald eagles wintered in the Casper area until 1950. Since then, while nesting in much of the United States declined to the point that the species was listed as endangered, the number of wintering bald eagles in Wyoming increased. A second reason that the conflict was minor is that the wells on Pine Mountain were shallow (1,000 feet to 2,000 feet), were drilled during the summer when bald eagles are not there, and were producing only during the summer for most of those early years. Third, the oil field is in the center of the large, flat top of Pine Mountain, whereas the bald eagles use roost areas in canyons a mile or more away from the oil field.

However, recent interest in oil and gas has been for deep wells (to 20,000 feet). Such wells require drilling during the winter when bald eagles are present. These recent wells are at the edge of the large, flat top of the mountain, or even off the top adjacent to the roost canyons; thus, the potential conflict is entirely different from that in the previous situation.

The article in "a recent issue of the *Oil and Gas Journal*" contains only one reference to the scientific literature; it is mostly a list of anecdotes of personal experiences with wildlife.

There is no statement in the RMP/EIS that prescribed burning and sagebrush spraying in deer and antelope winter ranges could cause 20-50% reductions in sagebrush, thus potentially reducing herd numbers by 10-25%. The

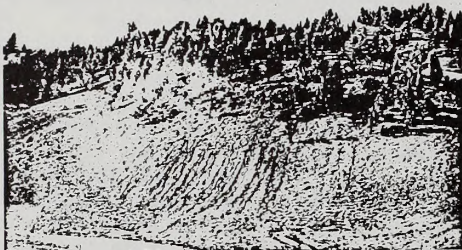
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5 At the same time you state (p. 164) that all but 5% of acreage disturbed by oil and gas activity will be reclaimed. I guess that the habitat wasn't destroyed after all. Also, you state that 800 acres of native range lands are destroyed by sand and gravel operations (p. 165). Later you indicate that only 40 acres per year are affected by sand and gravel operations, which would amount to 400 acres over a ten year period. Personally, I have never seen many sand and gravel operations on native range lands, usually they occur on essentially barren ground dominated by the presence of sand and gravel. After one goes through enough of this same type of baloney, and there is more, one begins to wonder if you really know what you're doing. It becomes obvious that there is a personal bias against minerals and mineral resource development on the part of someone, or possibly everyone.

6 Though data which might reflect on the nature and degree of the conflict between minerals and other resources tends to be scarce, there is sufficient information to at least get some idea of the seriousness of the conflict. The draft EIS indicates that oil and gas production in eagle habitat on top of Pine Mountain has been occurring for 30 years or more "with unknown, but probably minor, disturbance to bald eagles (p. 161)." Other similar situations are described in a recent issue of the *Oil and Gas Journal* (March 12, 1984, p. 117). You indicate that extensive prescribed burns and sagebrush spraying in deer and antelope winter ranges could cause 20-50% reductions in sagebrush, thus potentially reducing herd numbers by 10-25%. Participation of the wildlife biologist in such proposals makes the probability of such losses low (p. 171). Does there really exist enough data to evaluate a vegetative loss of from 20-50% and assess cause-effect relationships before such a proposal could be implemented? If so, then what are the effects of 5 acres of habitat temporarily lost due to an oil well site? It seems that an oil well location would be a minor disturbance, especially if the subject habitat is not at its maximum carrying capacity such that some shifting of wildlife away from the disturbance is possible. I wonder if some of the impacts to wildlife have not been overstated. A BLM publication indicates that "... the effects of an oil drilling operation revealed that the drilling operations had not interfered seriously with sage grouse nesting and strutting activities. The birds continued to occupy areas adjacent to the well site throughout the drilling period, even

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- 6 to the extent of nesting within a few hundred yards of the rig, strutting within 50 yards of the operations, and watering daily at sediment pools located at the base of the rig (BLM Technical Note on Sagegrouse Habitat Management, p. 6). The URA for Natrona County indicates that the extent of the conflict between oil and gas activity and sage grouse is unknown (Wildlife, p. 39). Three or four years ago the Rock Springs BLM District Office proposed that a study be done to determine the extent of the conflict between sage grouse and oil and gas. The study was never initiated. The kind of impact that no one ever looks for or thinks possible is where wildlife have destroyed part of their own habitat, causing a deterioration in vegetation and accelerated erosion (See below).



Overgrazing and trampling by elk stripped this hill of vegetation, causing extensive erosion. Photo courtesy of the U.S. National Park Service.

statement on page 170 and 171 specifically relates to *critical* winter range. There is a drastic difference between these types of range. The 20 to 50% reduction in sagebrush is well documented. The reduction of herd size by 10-25% if critical winter range is subject to vegetative manipulation is a professional judgment. The impact is not acceptable, and vegetative manipulation would not be allowed in critical winter range.

We are aware of the study done in Rock Springs regarding oil and gas operations, and sage grouse. The study you refer to is from Patterson's *Sage Grouse in Wyoming*, a text. This was a mention of one situation, not a study or series of tests. Further, there is no mention of (1) effect on nesting success, (2) production of young, (3) survival of young, or (4) how many grouse were at the site prior to drilling as compared to the number present at the time of the observation. The protection of sage grouse leks is a statewide standard policy defined by BLM's State Director. We will apply this policy in the PRRA as defined in WL-4 (appendix B).

7. We believe that the scope of this document is too broad for site-specific soil interpretation. On page 105 of the draft, we discussed the existence of soils surveys that allow site-specific interpretation when projects are proposed. The statements "soils in the PRRA can be described very generally," "site specific interpretations are not possible" and "more studies do not provide an accurate assessment of the amount of soil erosion in the area" are related specifically to the General Soil Map and the 1950 Missouri River Basin Studies. They are correct statements.

The section on water quality (pages 107-111 of the draft) does not imply that no specific water quality problems have been identified in the resource area because adequate water quality records are lacking. The tables that present water quality data are straightforward and factual.

The Natrona Watershed Unit Resource Analysis (URA) is a 48-page intensive analysis (completed in 1979) that includes photographs and data sources. The URA extensively discusses erosion problems at specific sites in the county, including Bates Hole, the North Platte River, and Salt Creek. You apparently have tied the range condition survey to the watershed URA and concluded that since most of the range is in good condition, there should be no watershed or water quality problems.

We described some of the factors contributing to erosion on page 105. The term "natural factors," as used in the document, is all-inclusive. We have merely listed some of those factors. Water quality problems have been identified. One area of concern is the North Platte River downstream from Bates Creek, where silt loads are high, causing an adverse impact on fisheries and plugging of Casper's water intake filters. Another area of concern is the Salt Creek drainage, where the sediment load is high. These water quality problems have been identified through the use of URAs and other data in the past five years. The data are based on a variety of physical factors. As you suggest, the presence of an oil well had nothing whatever to do with defining water quality. Oil wells may be, but are not necessarily, a factor, or any number of other factors may cause poor water quality.

8. The BLM plans to request a withdrawal from mineral entry on the Pterodactyl Track prehistoric fossil area. The site will be reevaluated and the actual fossil area boundary redefined. Preliminary field investigations since the draft RMP was published indicate that the area would encompass about 400 acres. No surface development would be

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The possibility of cause-effect relationships other than mineral exploration leading to erosion, water quality deterioration, etc. never seems to enter the minds of some people. Apparently you are finally willing to admit that TDS depends primarily on the lithology of each drainage basin (p. 108). In the area you always complain about the most, Salt Creek, large exposures of Cretaceous marine shales are present throughout, especially along the edges of uplifts. You constantly make statements that high salt and dissolved solid concentrations are largely the result of oil field brines from the Salt Creek Field and also the associated high levels of "surface disturbance." U. S. Geological Survey data for the Powder River Basin indicates that both surface and subsurface waters are high in sodium, chlorides, and sulfates (Hydrologic Investigations Atlas HA-465); concentrations are commonly over 2000 mg/l not only in the Salt Creek area but throughout northeastern Wyoming. The chemistry of surface and underground waters are largely controlled by the geologic formations which surface waters cross over and subsurface waters flow through. Figure 1 shows the general relationship between water quality and geology. Trying to understand cause-effect relationships between why a certain water source exhibits certain constituents, and the source of these constituents can be very difficult, due to the complexity of most natural situations. Figure 2 gives the primary constituents of sea water and provides a logical reason why waters in the Salt Creek area are prone to contain high concentrations of sodium, chlorides, and sulfates. The geologic formations exposed at the surface throughout the entire Salt Creek area are nearly all of salt water origin, consisting of interbedded marine sandstones and shales.

- 7 Several statements to the effect that oil and gas-related activities have caused high concentrations of sodium, chlorides, and sulfates in surrounding natural water sources is inappropriate without more data. "Soils in the PRRA can be described very generally" and "site-specific interpretations are not possible (p. 104)." Missouri River Basin studies "do not provide an accurate assessment of the amount of soil erosion in the area (p. 105)." You imply that no specific water quality problems have been identified within the resource area due to a lack of adequate water quality records. Yet you list water quality data from several reporting stations within the Platte River Resource Area.

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Figure 1. Chemical quality of water in streams flowing over specific rock types in tributaries of the Powder River (from Herdree, C. H., et al., 1957, "Sedimental and Chemical Quality of Water in the Powder River Drainage Basin, Wyoming and Montana," U.S. Geol. Sur. Circ. 170, 52 p.)

Dissolved Substance	Granite Substrate	Limestone Substrate	Gypsum Substrate	Shale Substrate
$\text{CO}_3 + \text{CO}_3^{2-}$	15.9	86.3	101.8	163.6
Ca^{+2}	10.0	32.2	121.4	139.4
Mg^{+2}	0.9	17.1	40.0	76.8
H_2SiO_4	11.9	10.1	10.2	6.1
SO_4^{2-}	3.2	5.7	383.9	1212.0
$\text{Na}^+ + \text{K}^+$	0.5	1.9	55.3	410.1
$\text{Cl}^- + \text{NO}_3^-$	0.6	4.7	14.5	12.1
Total ppm	43.0	159.0	721.1	2320.1

Figure 2. Molality of Seawater (from Mason, Brian, 1966, *Principles of Geochemistry*, 3rd Edition, New York: John Wiley & Sons, Inc., 529 p.)

Dissolved Species*	ppm	Molality
Cl^-	18,980	0.555
Na^+	10,556	0.459
SO_4^{2-}	2,549	0.028
Mg^{+2}	1,272	0.052
Ca^{+2}	400	0.010
K^+	380	0.010
HCO_3^-	140	2.5×10^{-3}
Br^-	65	8.1×10^{-4}
H_2BO_3^-	26	4.2×10^{-4}
F^-	8	9.1×10^{-5}
H_2SiO_4	1.3	6.8×10^{-5}
NO_3^-	1.0	1.0×10^{-5}
$\text{Fe}^{+2}, \text{Fe}^{+3}$	0.5	8.1×10^{-6}
$\text{Al}(\text{OH})_3$	0.01	2.0×10^{-7}
Total	34,479	1.106

*Other species total less than 1 ppm.

allowed unless the development was directed at interpreting the site. The ACEC designation will be removed. Before the Pterodactyl Track area is actually withdrawn from operation of the mining laws, additional site-specific investigations will be undertaken and more public input will be sought. If the area fails to warrant a withdrawal, the withdrawal proposal will be dropped from further consideration. (Also see page 84 of the draft.)

9. Cultural requirements are treated differently on various ownerships. The 3809 regulations do not apply to federal locatable minerals beneath private surface [43 CFR 3809.0-5(c)]. A significant amount of land in the PRRA is in that category; thus, the statement "small mining claims do result in the loss of cultural resources" is correct. The content of your statement is correct in relation to surface administered by the BLM.

10. We disagree. Representatives of the Black Hills Bentonite Company support the use of the bentonite pit as an ORV area. Black Hills Bentonite Company has agreed to participate in the cooperative management agreement. The BLM does not intend to relinquish management responsibility for these lands. The cooperative agreement will establish a plan for operation of the area.

11. We disagree that permitting sand and gravel development case by case is proper along the North Platte River. The river and adjacent land contain numerous resources that are locally and regionally significant. The question the RMP seeks to resolve is, Is development of sand and gravel more important than the watershed, water quality, recreation, aesthetic, and wildlife values? In that context, we believe that planning with a concern for surface disturbance along this important resource is a sound approach to resource management. Past planning decisions, current reaffirmation of those decisions by public and private sources, and full resource analysis by BLM staff specialists concerning the issue continues to support our preferred management position fully. We realize there are existing sand and gravel operations on the river within the ¼ mile buffer. We intend to protect those existing rights authorized for federal sand and gravel, and we have clarified that intention in the final RMP/EIS. Also see Response 1 to Letter 1

12. See Response 3 to Letter 28.

13. Lease stipulations are identified on page 317 of the draft RMP/EIS. The stipulations are applied case by case; there is no blanket application. We fail to see how the application of these stipulations prevents the industry from acquiring data, nor have examples been provided to validate this assumption. On the contrary, geophysical operators have virtually unlimited exploration opportunity.

14. We assume that you are referring to the decisions in appendix B and not stipulations. Decisions are defined through the planning process. The decisions in appendix B identify specific areas where a resource or resources may be particularly sensitive to surface development. The BLM cannot change the fact that some areas that overlie mineral resources contain adverse slopes, highly erosive soil, threatened or endangered wildlife, or critical wildlife values or habitats. We do try to allow resource development and to mitigate the impact of that development where possible.

We disagree that to drill or not to drill is the only choice a company has. In most cases permissible times are available, so that companies are not required to make a choice between drilling or not drilling. The company is required only to begin drilling at a specified time. Once drilling has begun, the operation is considered an existing facility and the seasonal restriction no longer applies.

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7. Evidently you have never considered that no problems exist because the area is naturally barren of vegetation, may be over-sensitive to use by livestock and/or wildlife, or lies fairly close to an uplifted area where surface runoff will accelerate erosion, etc. You indicate that a preliminary analysis of three watersheds on similar range sites indicates that mean sediment concentrations can be correlated with existing range condition (p. 111). Of the half million acres in Natrona County subjected to range surveys (p. 79) 80% are rated as being in "good" condition and 10% is rated to be in "fair" condition. You also indicate that this is a significant improvement from the 1950's to 1980. If one checks the BLM URA data base what one finds is "nothing (Natrona URA, watershed, p. 3)." The possibility that no problems have been identified because there are none does not seem to have been considered.

You indicate that TSS "which reflect the rates of erosion within watersheds, depends on the erodibility of the soil and the influence of protective vegetation (p. 108)." The most widely advocated method of assessing sediment yield presently in use is the Pacific Southwest Interagency Committee Method (PSIAC). The main determinants of the erosion process are climate, cover, soil characteristics, geology, topography, and land use. Your suggested soil and vegetative factors offer a much too simplistic approach to assessing a highly complex dynamic system. Not that it makes much difference since you don't have the necessary data to be able to delineate cause-effect relationships. But you still have the nerve to say that from "general information we can extrapolate which areas are most likely to be subject to erosion (p. 105)." Considering all of the past discussion, your failure to recognize the complexity of erosional processes, your lack of data, etc. I suspect your most important indicator of erosion is the nearby presence of an oil well.

8. With respect to the Pterodactyl track ACEC which you apparently intend to make subject to a mineral withdrawal, the only fossil evidence left consists of a 4x4-foot slab of sandstone outcrop. None of the professional people contacted after the initial discovery has ever shown any interest in the site. A local junior high school science teacher collected all of the good material known to be present. Since the footprints appear in a beach sand where at least

Comments and Responses

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8 some wave action was no doubt present it is unlikely that any fossil remains of value will be found. The flying reptiles' bones were lightly built, even to the point of being "hollow" in order to conserve weight while retaining reasonable structural strength. If any of the animals died in the beach environment where their footprints occur, their remains would almost certainly have been broken and scattered in all directions. Fossil remains found in other parts of the world are limited to shales. The probability of finding additional scientifically useful material within the Pterodactyl ACBC is very, very low.

9 With respect to the presence of cultural resources on mining claims, you do not seem to understand what the regulatory requirements are. Anyone who is using any kind of mechanized equipment for mineral exploration (drill rig, etc.) must file either a Notice of Intent (if disturbance is less than 5 acres) or a Plan of Operations (if disturbance is more than 5 acres) with the BLM. In either case BLM should respond back to the claimant noting any potential problems. For a Plan of Operations BLM is required by regulation to complete the cultural inventory for the project area within 30 days. Any salvage costs, etc. are to be the responsibility of BLM. If any materials are lost or destroyed after the claimant files the proper paperwork, the responsibility falls on BLM for not meeting their legal obligations, and not on the mining claimant.

10 I also suspect that the mining claimants who have claims in and around the Poison Spider bentonite pit may have some objection to management of the area being taken over by an ORV club.

11 The decision to make it a standard practice to disallow sand and gravel development within 1/4 mile of the North Platte River seems ridiculous. Every mile for such material is discretionary anyway, thus it would seem more reasonable to deal with each situation on a case-by-case basis. I know that there are some gravel operations within 1/4 mile of the river west of Casper, some of these are with BLM approval. What are the problems associated with them? I doubt if you've ever given much thought to the situation, probably someone just decided it would be a good idea to restrict sand and gravel operations away from the river. Most of the better sand and gravel deposits are located adjacent to the river. You've indicated that there is a shortage of good de-

15. We disagree. We believe that the flexibility to waive constraining decisions is necessary because environmental conditions change and impacts can be mitigated satisfactorily for the most part. The BLM's responsibility for considering all of the natural environment and the associated resources is not alleviated; resource development often can be allowed after environmental assessments have identified resource conflicts and necessary measures to mitigate impacts.

16. We have placed the overlays from Volume 2 (draft RMP/EIS) one on top of the other. Major areas of overlap are the Laramie Mountains, the South Big Horns, and the North Platte River. Nearly all of the area rated as high potential for oil and gas has the fewest restrictions. The statement that each acre has 1 1/2 restrictions on it is unfounded.

17. Not all buffer zones are based upon how far oil can be drained. Sometimes the boundaries of buffers are based upon the need to mitigate or protect against visual intrusions, or upon other resource considerations that may require more than 1/4 mile. At present, the 1/2 mile limitation is a standard that is used statewide.

18. We disagree. We believe you have misinterpreted table 3-18 on page 84 or merely wish to imply that the BLM has segregated these lands from one or more of the mining and mineral leasing laws. We have stated on page 83 that the BLM could propose changes on only 7,900 withdrawn acres in this plan. The remaining lands that are segregated (excluding the coal classification that applies only to coal leasing) are administered by other state or other federal agencies. These withdrawals were enacted by Congress, by presidential executive order, or by the Secretary of the Interior. They will remain in that status unless revoked or changed by the Congress, the President, or the Secretary of the Interior.

Appendix B in the draft RMP/EIS contains 23 decisions that restrict surface development in the PRRA. Of these, 14 are for no surface development or occupancy in very specific areas or sites, 3 can be waived pending field examination and proper mitigation of impacts, and 6 are seasonal restrictions. The RMP lists all the decisions that constrain surface development. The BLM uses environmental assessments to evaluate impacts and identify mitigating measures for proposed actions. Planning decisions are derived through the planning process, which is subject to full public participation. All plans are available for public inspection.

The Federal Land Policy and Management Act of 1976, as well as other legislation, dictates that public lands be managed for multiple use and sustained yield (43 U.S.C. 1701), that they be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air, atmospheric, water resource, and archeological values, and that they be managed in a manner that recognizes the nation's need for domestic sources of minerals, food, timber, and fiber. FLPMA does not require that all public lands be available for all possible land uses. We believe the preferred plan complies with FLPMA and other relevant statutes by allowing opportunities for the greatest diversity of land use on most public lands but precluding certain uses on special areas with limited or sensitive resource values.

A total of 309,900 acres of federal minerals in the PRRA are withdrawn from mining. As mentioned at the beginning of this response, much of this is administered by other agencies. The BLM controls only 4,600 acres of these existing withdrawals: 3,300 acres in the North Platte

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11 deposits near Casper, why don't you assess each proposal on its own merits?

12 You have indicated three separate areas in Natrona County where several tracts "will not be leased for oil and gas. These parcels have been removed because of resource considerations (p. 304)." All of the tracts listed are four miles or less from an existing RGS. Two of the three sets of parcels are approximately one mile or less from an existing RGS boundary. It seems that since oil and gas is also a "public resource" it should also be given equal consideration with other resources. Based on the expansion of several RGS's and the potential for additional RGS expansions, especially in the area extending from Pine Mountain to the padwater area, the subject parcels should be opened to oil and gas leasing "because of resource considerations."

The basic requirements for conducting mineral exploration activities consist of money, manpower, technology, and a place to look. Without the last item, all of the rest are meaningless. Mineral exploration and development activities, by their very nature, must incorporate a great deal of data collection and interpretation, and therefore, a large number of uncertainties. In order to evaluate the oil and gas potential of a given area the subsurface geology of the area must be interpreted. To evaluate subsurface geology, the geologist must be thoroughly familiar with the fundamentals of surface geology. The geologist must be able to analyze and interpret complicated subsurface stratigraphic and structural relationships involving folds, faults, unconformities, facies changes, etc. which may or may not be reflected by the surface geology.

Any rock that is porous and permeable can serve as a reservoir for oil and gas accumulation. Sedimentary rocks, especially sandstones and carbonates, are the most common rock types which possess these properties. Oil and gas can be trapped, either completely or in part, by the deformation of the reservoir rock. The deformation may be accomplished by folding, faulting, or both, in either a single episode of several episodes. Oil and gas can also be trapped, either completely or partially, by stratigraphic variations in the reservoir rock as it was originally deposited, or at some later point in time due to chemical processes. All of these factors control the direction and

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rate of flow of fluids within the rock and may influence or control the position of the pool within the structural or stratigraphic trapping feature. Many traps are the result of complex combinations of structural, stratigraphic, and fluid variations that are difficult to evaluate from available data before the oil and gas reservoir is discovered. There is no direct method of locating an oil and gas reservoir.

A recent historical analysis of oil and gas exploration, conducted by H. William Menard, indicated that during the 1970's the vast majority of new petroleum resources discovered were small in size, but large in number. The industry, in general, discovered about three times as many small fields (10,000 to 1,000,000 barrels) than it has discovered in the past with the same amount of drilling. The oil and gas industry is becoming more adept at finding small fields containing an average of 300,000 barrels of oil or equivalent gas and covering an area of about $\frac{1}{4}$ square mile. The oil and gas potential of an area cannot be evaluated until after the promising structures have been extensively drilled and evaluated.

13 The previous discussion enumerates the large amount of data which the oil and gas industry must accumulate in order to conduct oil and gas exploration activities. Information on subsurface structure and the physical characteristics of subsurface formations is primarily accumulated from geophysical work and drilling logs. Controlled-directional (slant) drilling in any area where the subsurface formations are not essentially flat-lying can be extremely difficult, if not impossible. The projected small size and large numbers of oil and gas producing fields remaining to be discovered gives data accumulation efforts great importance for increasing petroleum reserves and production. The basic impact which the lease restrictions pose is not only to prevent petroleum discoveries, but also to prevent or hinder the constant data acquisition which is necessary to conducting a viable mineral exploration program.

14 In the past, attention has been centered around each stipulation one at a time. This tends to obscure the real impacts caused by all of the restrictions taken together as a whole. Seasonal restrictions have, in the past, not been considered to be very significant, but with the trend towards drilling

River withdrawal and 1,300 acres in the C&MU Act classification at Fremont Canyon. The BLM can do nothing to change the remaining 305,000 acres of existing withdrawals.

Under the preferred management plan, the following withdrawals would be added: Table Mountain, 2,300 acres; Muddy Mountain, 1,000 acres (conversion from C&MU Act classifications); Pterodactyl Track area, 400 acres; and Jackson Canyon, 1,300 acres, for a total of 7,200 acres of new withdrawals. The North Platte River withdrawal would be continued, making a total of 10,500 acres of BLM-controlled withdrawals. The Fremont Canyon C&MU Act classification would be dropped.

The 7,200 acres of new BLM withdrawals plus the 305,000 acres already withdrawn that is not controlled by BLM would make a new total of 312,500 acres of federal minerals withdrawn from mining.

A total of 432,700 acres are withdrawn from mineral leasing. Of this total, 417,000 acres are segregated under a coal classification (it does not affect any other mineral). The other acres withdrawn are detailed in Response 4 to Letter 11. No additional lands are proposed for withdrawal from mineral leasing. Once the coal classification is terminated, a total of 15,700 acres will be withdrawn from mineral leasing. This will be reduced to 9,900 acres if the Camp Guernsey withdrawal is modified.

A total of 160,900 acres are segregated from *surface disposal*, not from mining. This designation merely indicates that the BLM would not dispose of that surface acreage; it has no effect on the availability of the minerals for mining.

The BLM manual supplement 3109 provides guidance for dealing with development on slopes. It does not define rules that require compliance; therefore, slope restrictions can be applied as deemed necessary by BLM field personnel.

19. We are aware of the district memo, the IBLA (Interior Board of Land Appeals) decision, and BLM Washington Office instruction memo no. 84-415, to which you refer. The decisions from past planning were evaluated and brought forward in the RMP. Some were altered for clarity where needed. The RMP reflects accurate and pertinent decisions from past and current planning. No decision in the RMP conflicts with policy or regulations.

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14 deeper wells and longer associated drilling times the choices now simply amount to either let a company drill or don't let them drill.

15 Much has also been made in the past concerning the District Manager's option to grant special permission to waive a lease restriction. If, or when District Managers do start granting special permission to unravel layer after layer of restrictions, then this implies something about the ultimate validity of the restrictions which perhaps should not have been imposed in the first place.

16 The subject RMP notes that there is a certain degree of overlap among the different sets of restrictions designed to protect the various classes of natural resources (p. 186). What they don't tell is how great this overlap really is. There are an overall average of $1\frac{1}{2}$ restrictions on every acre of Federal mineral estate in the Platte River Resource Area. If one takes the various maps supplied with the RMP concerning lease restrictions and places them one on top of another you will begin to get a clear picture of what is happening. Some of the restrictions are not given on the set of maps associated with the RMP. The highest probability for experiencing overlapping restrictions is in the foothills areas along mountain fronts where new exploration activity is expected to increase.

17 There are several places in the Draft EIS where BLM assumes that an oil well can effectively drain any petroleum within a distance of $\frac{1}{2}$ mile (p. 151, etc.). This premise is used to place $\frac{1}{2}$ mile buffer zones on historical and archeological sites, scenic areas (Red Wall), recreation areas, etc. Has anyone ever wondered why the Wyoming State Oil and Gas Commission uses 40-acre spacing as a standard throughout the state? I suspect it's because an average well can only drain an area of one-eighth mile from its location. This is a lot less than the $\frac{1}{2}$ mile which BLM has used for years based on what appears to be an incorrect assumption. The one-eighth mile distance comes much closer to the realities one sees when trying to assess oil fields.

18 Statements such as "Decisions that seek to protect various resource values do not have a significant effect on the availability of the oil and gas resource (p. 164)" are obviously not based on any type of real assessment. Denial of access to the public lands prevents the necessary information on which mineral potential is evaluated from being collected. Of the Federal mineral lands avail-

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18 available 309,900 acres are segregated from mining, 432,700 acres are segregated from leasing, and 160,900 acres are segregated from mineral disposals (p. 84). In the present document 54,800 acres of withdrawals are being considered along with 102,900 acres for disposal (p. 22). Of 29 oil and gas restrictions 27 begin with either "no surface occupancy ..." or "no surface disturbance ...". In the recent Oil and Gas Environmental Assessment which was completed 14 additional restrictions were added. The preferred alternative in the RMP proposes leaving things like they are except for the addition of a new set of restrictions to be applied to the front and along the foothills of the Laramie Range. The South Big Horns Oil and Gas EA uses a 15% slope restriction because the area is supposedly "easily eroded." Most of the area consists of Flathead Sandstone and Madison Limestone exposed at the surface.

Wyoming BLM Manual Supplement 3109, Surface Management Requirements for Oil and Gas Operations, indicates what problems may arise in association with various slope classes. On a 20 percent slope, moderate erosion and very good revegetation success can be expected; on a 25 percent slope, moderate erosion and good revegetation success can be expected; on a 33 percent slope, moderate erosion and fair revegetation can be expected; at 50 percent slope, critical erosion and poor revegetation can be expected. Thus the critical slope seems to be somewhere between 33 and 50 percent.

19 When those segments of the public affected most by all of these ridiculous restrictions ask for some reconsideration they get ignored. It is very obvious from the past discussion that the level of restriction placed on mineral exploration is not commensurate with the level of resource analysis which has been attempted. The legal mandates of NEPA and FLPMA are apparently beyond your ability to comprehend. An internal District Memo from the Planning Coordinator to the Platte Area Manager, dated August 19, 1983, indicates that "The Oil and Gas EA contains several decisions that conflict directly with policy and regulations." 18EA in several instances has negated the use of some restrictions because of a lack of adequate justification. Washington Office Instruction Memorandum No. 84-415, dated April 17, 1984, indicates that the basic purpose for using a stipulation should be defined, along with the criteria for use, and proper justification and documentation of the need for the stipulation.

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It is very obvious that some people in BLM won't listen to anyone once their minds are made up about something.

I haven't run out of comments, but I have run out of time. Since you persist in ignoring every one, you may someday find that your "game" has been moved to where you don't have complete control over all that is said or done. A "new game" played in a "new court" would no doubt reveal if you really understand what you are doing, or why. Personally, I don't believe you do.

Eldon L. Allison Jr.

Comments and Responses

16



WYOMING
EXECUTIVE DEPARTMENT
CHEYENNE
June 8, 1984

ED HIRSCHLUM
GOVERNOR

Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

1 The Resource Management Plan and Draft Environmental Impact Statement for the Platte River Resource Area has been circulated for state agency review. Copies of agency comments are enclosed for your consideration and use. Several of these comments contain additional resource information which should be incorporated into the final plan. Comments reflecting concerns over changes in Bureau management policies, particularly those affecting existing state/federal cooperative management arrangements, must also be reconciled. Potential innovative cooperative management techniques involving issues such as grazing, public access, prairie dog control, recreation, wildlife habitat, and land tenure adjustments should be fully explored.

2 One of the more significant changes in the Bureau's new planning regulations is the strengthening of intergovernmental consistency requirements. Bureau resource management plans are now required to be consistent, to the maximum extent practical, with official approved and adopted resource related plans, policies and programs of other federal agencies, Indian tribes, state and local governments. This consistency review is to occur prior to the approval of a proposed resource management plan. My office is prepared to work with your office and the State Director's Office to attempt to resolve any such inconsistencies identified in the planning and public review process.

Thank you for the opportunity to review and comment on this document. Please keep me informed of the progress in this effort.

Sincerely,
Ed Hirschlum

ER/pct

Enclosure

Responses to Letter 16

1. The additional resource information submitted by state agencies on the Platte River RMP/EIS has been reviewed and incorporated where applicable. We have accommodated state agency concerns regarding changes in BLM management policy to the extent that we can without conflicting with BLM policy. The letters received with your cover letter have been numbered 17 through 25, and responses to the comments therein follow each numbered letter.
2. We will comply with all the consistency requirements mandated by statute and regulations.

17A

DIRECTOR AND
STATE GEOLOGIST
GARY B. GLASS

GOV. ED HIRSCHLUM
DONALD L. VIAL
DONALD B. BASSO
EDITOR
DAVID COPELAND

Academy of Sciences, Nov. 1983



THE GEOLOGICAL SURVEY OF WYOMING
UNIVERSITY OF WYOMING
BOX 3008, UNIVERSITY STATION
LARAMIE, WYOMING 82071

(307) 742-7054 (307) 721-3820 (307) 766-2286

CHIEF, DIRECTOR
AND STATE GEOLOGIST
MINERAL RESOURCES
W. J. HAUSEL
STAFF GEOLOGISTS
JAMES CASE
ENVIRONMENTAL
ROBERT DE BRUN
STRATIGRAPHY
RAYE HARRIS
VYVERAL BOFF
ECON
RIC-LAW JONES
JOURNAL
ALBERT VERALGUS
TETROLEUM
LARGA TONY TECHINIAN
JAMES ROBERTS

MAY 04 1984

MEMORANDUM

To: Dick Hartman, State Planning Coordinator
From: Gary B. Glass, State Geologist, and
Staff Geologists W.O. Hausel, Ray Harris,
Alan VerPloeg, and Dick Jones
Subject: Platte River Resource Area RMP
Date: April 27, 1984

Geology (page 60)

1 When referring to the age of rocks, Tertiary should be capitalized.

Oil and Gas (pages 61-65)

2 Table 3-3 taken from the 1982 Minerals Yearbook is only showing taxable production not gross production. Gross production figures are available from the Wyoming Oil and Gas Conservation Commission and are considerably larger than taxable production.

3 There is no mention of the current exploration for subthrust traps similar to Tepee Plate, the trend toward deeper drilling, and the improvement in seismic resolution which is helping to locate stratigraphic traps. This section could include a discussion of the types of traps in the area and some examples.

4 There should be a discussion of the significance of Salt Creek field to the area and the effect of its declining production.

Coal

5 Page 65; 2nd paragraph: The references cited as descriptions of coal-bearing formations do not adequately describe the formations that occur in the PRRA: 1) Brown (USGS Prof. Paper 375) does not describe the coal bearing formations in this area except in very general terms; 2) Matson & Pinchcock (1977) describe the Fort Union Formation in the northern Powder River Basin, MT, about 200 miles north of the EIS area. Their descriptions do not apply; 3) Publications by Montana Bureau of Mines & Geology (1973 & 1980) only deal with Montana coal-bearing rocks. Their descriptions don't apply to the southern Powder River Basin.

Responses to Letter 17

1. We agree. The change has been made.
2. Gross production is about 8% more for oil and 30% more for gas than net production. We have changed the title of table 3-3 to read "Net Oil and Gas Production..." and have updated the information by using the 1983 Minerals Yearbook.
3. We have stated on page 65 that "New techniques allow for more detailed evaluation at deeper depths," and that the constant acquisition of new data affects evaluation regarding oil and gas potential. While we agree that techniques in seismic exploration continue to be improved, the discussion of such techniques and types of traps you refer to would not contribute significantly to the RMP/EIS.
4. The Salt Creek field is mentioned in a number of places throughout the document. Its importance is indicated from several angles. As to productivity, our information is that Salt Creek field will be in production for at least 30 more years, but more likely 40 to 50 years. The production for this field has been included in our economic production projections on a county basis. We recognize that the Salt Creek field has long been a major source of revenue to the economics of communities in the resource area. It has also been noted that as the field enters later stages of production and revenues from that source decline, other sources of taxes will be required to compensate for the loss.
5. We agree with all three points and have deleted these references and replaced them with U.S. Geological Survey Bulletins 471-F, 806-A, and 1147-D.

17B

Dick Hartman

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Page 2

The following publications are better references:

- 5 1. Denson, N.M., and Horn, G.H., 1973, Geologic and structure map of the southern Powder River Basin, Converse, Niobrara, and Natrona counties, Wyoming: USGS Misc. Investigations Series Map 1-877.
2. Sharp, W.N., and Gibbons, A.B., 1964, Geology and uranium deposits of the southern part of the Powder River Basin, Wyoming: U.S. Geological Survey Bull. 1147-D, p.D1-D60.
3. Kent, R.C., 1973, Dave Johnston coal strip mine road log: Wyoming Geological Association Earth Science Bulletin, Vol.6, No.4, (Dec.,73), p.49-59.
4. Duell, G.A., 1969, Pacific Power & Light's coal operation, Converse County, Wyoming: Wyoming Geol. Association 21st Annual Field Conference Guidebook, p.155-160.
5. USGS Bulletins 471-F (p.441-471), 806A (p.1-14), and 471F, (p.472-515).

6 Page 65; 3rd paragraph: What is meant by "the coal beds in the region being generally thick and very wide"? This is quite misleading because the seams only average 8-36 feet thick, which is quite thin for Powder River Basin coals. By "very wide" it must mean that the coal beds are "quite extensive laterally" or "very widespread".

7 Page 65; 3rd paragraph: Detailed discussions of coal beds in the EIS area are only found in Glass, 1976 and 1980. All the other references do not discuss coal beds in this area.

8 Page 66, 2nd paragraph: There is no evidence that the coal in the Glenrock mine area or in the Antelope mine area is particularly high in ash or sulfur. Although the ash content is slightly higher in the Glenrock area than in the Gillette area and the heat values are definitely lower in Glenrock, the statement does not apply to the Antelope mine, which is comparable to coal mines in the Gillette area. There is no evidence that the sulfur values in the coals of the EIS region are higher here than in other parts of the Powder River Basin.

9 Page 66; Table 3-5: 1983 Coal production for the county should be added to this table: 2,684,011 tons.

10 Page 67; 3rd paragraph: It should also be mentioned that the Mesaverde Formation contains coal beds along the margins of the Powder River Basin. In addition, the Lance Formation contains mineable coal beds in the southern part of the Powder River Basin that should be described in the EIS (especially those mines in the Glenrock area).

.....

6. We agree with this point and have deleted the words "generally thick and very wide" and replaced the words "quite laterally extensive". Thickness was addressed in the preceding paragraph.

7. We agree with this point and have deleted the other references at the top of page 66.

8. We agree with this point and have deleted "and sulfur" in line 3; the word "and" in line 8; and the words "Antelope coal" and the "s" from the word "plans" in line 9.

9. We agree with this point and have added coal production for 1983 to the table as you suggest.

10. We agree with these points and have changed the first word in line 4 from "the" to "these," deleted the words "Wind River Basin," added "s" to the word "portion," and added a final sentence to this paragraph as follows: "The Lance Formation contains additional minable coal beds in the Glenrock area of the Southern Powder River Basin".

11. We agree with this point. We have included a reference to the Geological Survey of Wyoming, County Resource Series No. 6, in the "Additional References."

12. We generally agree with these points. The Mesaverde Formation (Upper Cretaceous) is included in the table. There has been limited production from the Mesaverde in the past, and its production potential is moderate. The Lance Formation has a history of coal mining activity but no longer produces. It should therefore be listed as "past production" with moderate production potential. The Wind River Formation is a lateral equivalent of the Wasatch Formation (indeed both formations are Wasatchian in age—at least in part), and the formation name in table 3-6 has been changed from "Wasatch" to "Wasatch-Wind River."

13. We agree with this point. The following paragraph has been added:

Thick subbituminous coal deposits occur in both the Fort Union and Wasatch formations, which underlie much of the Powder River Basin portion of Converse County. Movable coals also occur in the Lance Formation in the Glenrock vicinity. Coals from the Fort Union and Wasatch formations of Converse County have the following average characteristics: moisture content, 25.6%; fixed carbon content, 33.1%; volatile matter, 33.4%; ash content, 7.9%; sulfur content, 0.7%; and heat value, 8,155 Btus per pound, as received. Converse County is underlain by an estimated 4.1 billion short tons of subbituminous coal (1981 Keystone Coal Industry Manual).

14. We are changing the heading for this section to "Sodium Sulfate" and adding the following.

A commercial deposit of sodium sulfate, frequently called trona, is located northwest of the town of Natrona. It is a deposit in a Recent playa lake.

15. We have changed the table accordingly.

16. We have removed Thermopolis Shale and have noted it should be changed to Mowry. We have removed Cody from the table.

17. Guernsey has been changed from Devonian to Mississippian. The potential for both Madison and Guernsey has been changed to high.

18. "Trona" has been changed to "sodium sulfate (sometimes call trona)."

17C

Dick Hartman

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Page 3

11 Page 67; 3rd, 4th and 5th paragraphs: These paragraphs should be referenced to the Geological Survey of Wyoming County Resource Series C35-6 as all the information in them was taken from this publication.

12 Page 69, Table 3-6: Under "Coal", the Mesaverde Formation (Upper Cretaceous) should also be listed as a coal-bearing formation, as should the Wind River Formation. Also, the Lance Formation is not presently mined and whether it has "high" mineral potential is very debatable.

13 Page 66: There should be a discussion of coal resources, reserves, etc. for Converse County similar to that of Natrona County (p.67).

Trona

14 Page 67: There is no trona in the resource area. The EIS is incorrectly referring to sodium sulfate in the form of mirabilite ($\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$) as "trona". The deposit is Recent and reportedly is still fed by brine springs. It occurs in a soda lake and is certainly not a lense in the Cody Shale.

Locatable Minerals

15 Page 69, Table 3-6: There is production of uranium from the Fort Union Formation. In the 1960's these deposits were referred to as Wasatch, but not recently.

16 We are unaware of any bentonite production from the Thermopolis Shale, yet the table lists it with "high potential". In this area bentonite is mined from the Mowry, Steele, and possibly the Frontier formations.

17 We believe limestone potential should be rated "high" rather than "moderate". The Guernsey limestone is Mississippian in age, not Devonian.

18 Again, this table incorrectly lists "trona" production from the Cody Shale. This is actually sodium sulfate production from a Recent playa lake.

19 We are not aware of any copper production despite the table listing it. Also, since feldspar is mined in the resource area, we believe it to have more than "low potential". Demand may be low. Based on taxable production, the following amounts of feldspar were mined by Pacer Corporation: 1979 - 206 tons; 1980 - 200 tons; 1981 - 25 tons, 1982 - 172 tons.

20 There is uranium potential in the area in the Flathead Sandstone and related unconformities. The area is being explored for these types of occurrences.

21 Vermiculite, garnet, anorthosite, gold, titaniferous sandstone, Rare Earth Elements, talc, silica sand, specialty sand, and graphite occur in the area, but their resource potential is not addressed.

.....

Comments and Responses

17D

Dick Hartman

April 27, 1984
Page 4

- 22** This table underrates the copper and iron potential and does not even rate gold potential which should be rated high. Both the Hartville Uplift and the Granite Mountains (Sweetwater Uplift) contain Archean iron-formations that are excellent potential hosts for gold (see: Phillips, G.N., et al., 1984, An epigenetic origin for Archean banded iron-formation-hosted gold deposits: Economic Geology vol.79, no.1, p.162-171, and Hausel, W.D., and Harris, R.E., 1983, Metallogeny of some Wyoming deposits: Colorado Mining Assoc. Yearbook, p.46-63).
- 23** Finally, "Precambrian" is not spelled with a hyphen.
Iron and Limestone (page 71)
- 24** The Sunrise mine is not officially abandoned. It is on standby according to CF & I, and they maintain it with a small maintenance crew.
- 25** Limestone is quarried in Goshen County for sugar rock though the EIS does not note it.
Other Locatable Minerals (page 71)
- 26** There is no mention of base and precious metals in the Esterbrook District, the Warbonnet District, the La Prele District, and the Deer Creek District of the northern Laramie Range. There is no mention of base and precious metal potential of the Elmers Rock greenstone belt even though a portion of it extends into Platte County. There is no mention of diamond potential even though the Iron Mountain kimberlite district extends into the southwestern corner of Platte County. There is no discussion of base, precious and ferrous metal potential and beryl deposits in the Hartville Uplift. Precious, base, ferrous, and ferroalloy metals and precious stones (rubies, sapphires, and jade) should be mentioned for the Granite and Rattlesnake mountains. The EIS also refers to the wrong map in this section. Instead of map 8, it should read map 7.
Energy and Minerals (page 244)
- 27** There is no mention of the 1/4-mile sand and gravel extraction rule the BLM has proposed changing. It should be discussed here.
Map 6
- 28** This map only shows nine gravel pits when there are upwards of 100 in the area.
Map 7
- 29** This map shows Teton's uranium in-situ leach operation about 40 miles northeast of its true location. The Morton Ranch mine area is 10 miles too far southeast and the Highland mine is about 5 miles off its true location.

17E

Dick Hartman

April 27, 1984
Page 5

- 30** The symbolism used on the map is very hard to interpret. We did notice that this map correctly identified the soda lake deposit as sodium sulfate, not "trona".
References
- 31** There is no reference to our Converse County report, County Resource Series No.1, 1972, 22 pages. The Geological Survey of Wyoming is also referenced under the "Wyoming Geological Survey".

19. We did have information indicating there was some copper production long ago; therefore, we feel it should remain on the table. We agree that feldspar potential should be at least moderate and have changed the table to reflect that value.
20. We have added the Flathead Cambrian exploration to the formation under Uranium.
21. The reason these minerals were not included is that they are not being mined in any identifiable economic quantity, nor is their resource potential known.
22. We have added gold to table 3-6, as follows: Gold, Archean, 2,000 (age), exploration (activity), moderate (mineral potential).
23. We have corrected the spelling of "Precambrian."
24. We have deleted the sentence "The mine was abandoned in 1982."
25. Paragraph 4 on page 71 has been changed to read as follows: "Limestone is quarried in Goshen County for use in the sugar beet industry, and mining claims are held on deposits in Platte County for future use. A large . . ."
26. The section on other locatable minerals has been corrected to read as follows:

The resource area contains several mineral deposits of varying potential and value. Base metals and precious metals occur in the Esterbrook District, the Warbonnet District, the LaPrele District, and the Deer Creek District in the Laramie Range. The Elmers Rock greenstone belt, which extends into the southwest corner of Platte County, has potential for development of base and precious metals. A portion of the Iron Mountain kimberlite district extends into southwestern Platte County, providing potential for diamond production. The Hartville Uplift provides potential for several different base and precious metals as well as for beryl. Similar potential, as well as potential for precious stones such as rubies, sapphires, and jade, exists in portions of the Granite and Rattlesnake ranges in the southwest corner of Natrona County.

Potential for some development exists in the resource area for vermiculite, mica, garnet, pumicite, anevthosite, titaniferous sandstone, rare earth elements, talc, silica, and graphite. These deposits occur primarily in the Hartville Uplift, along the north and east flank of the Laramie Range, in the Rattlesnake Range, and in the Granite Range. The locations of some of the more important locatable minerals are illustrated on map 7. Teton's uranium in situ leach operation is in T. 34 N., R. 74 W. Morton Ranch Mine is in T. 36 N., R. 73 W., and the Highland Mine is in T. 36 N., R. 72 W.

Pacer Corporation has operated a feldspar and beryl mine on Casper Mountain. The feldspar is used in ceramics and to make dentures. Although there has not been any recent production, claims are being maintained and production could resume in the future.

The dollar value of miscellaneous minerals produced in Natrona County in 1982 was \$753,431; for Converse County it was \$104,862.

27. This information has been clarified in other locations in the text (see Response 1 to Letter 1).
28. We do not have complete data on the numbers and locations of the sand and gravel operations you mention.

Comments and Responses

29. See Response 26, above.
30. We agree this map was unclear.
31. The reference has been placed in our "Additional References" section. The Geological Survey of Wyoming is listed as "Wyoming. Geological Survey" so that all agencies of the state of Wyoming are grouped under "Wyoming." just as federal agencies are all grouped under "United States."

Responses to Letter 18

1. We agree with your suggestion, and a meeting will be scheduled.
2. We will see that you receive a personal copy.

18  **THE STATE OF WYOMING** **ED HERSCHLER**
GOVERNOR

Department of Environmental Quality
Water Quality Division

1111 EAST LINCOLNWAY CHEYENNE, WYOMING 82002 TELEPHONE 307 777 7781
June 8, 1984

By: E. J. Fanning

COMMENTS - PRRA Resource Management Plan - DEIS

The Bates Hole Watershed Management Plan and the designation of the Salt Creek drainage as an ACEC are the portions of this document towards which the Water Quality Division intends to exert its support and future implementation efforts in the area of non-point pollution control. On examination of the enclosed overlay maps, the Stinking Creek drainage (#22) in the Bates Hole Watershed is of particular interest for our grazing-sediment work with BLM.

1 I would consider a late summer meeting with the Casper District Office appropriate to discuss how we may initiate a special study in that area to integrate our concerns into the progress of the management Plan for that watershed.

2 I would also like to obtain a personal copy of this document and any subsequent documents that result from it.

cc: Larry Robinson
Michael Carnevale

Comments and Responses

Responses to Letter 19

1. The Platte River Resource Area staff met with the District VII Game Division staff and Area 55 Fisheries Division staff on June 28, 1984, because of the WGFD comments about the adequacy of the draft RMP/EIS. The WGFD personnel said at that meeting that adequacy was not at all the problem; instead, their specific comments were intended to clarify certain points for inclusion in the final EIS. They said they did have difficulty with organization of the document, particularly in following a particular area through each of the alternatives. Overall the WGFD staff felt that the RMP/EIS and alternatives were adequate, although some changes and clarification were needed. The BLM believes that the alternatives are consistent, and that resource analysis was done thoroughly.

Delineation of alternatives (continuation of existing management, low level, moderate level, and high level management) was presented in chapter 2 for the entire resource area and not for each resource management unit (RMU). The preferred management plan presented in Chapter 5 describes management within each RMU.

Paragraph 1 of appendix B was written to show that all actions of all programs (forestry, range, wildlife, recreation, minerals, realty, and watershed) are subject to the decisions listed in that appendix. Thus, many potential impacts to fish and wildlife resources are considered and mitigated by these planning decisions.

The introduction to chapter 4 stated that impacts were to be discussed for Alternative 1, and that if these impacts would be essentially the same for other alternatives, the description would not be repeated. Thus, when there is no discussion of impacts to fish and wildlife resources from a particular program (for example, range) for Alternatives 2, 3, or 4, the impacts would be essentially the same as those described for that resource for Alternative 1.

2. The criteria developed for land disposals (appendix A, page 298) preclude disposal of public lands that contain significant wildlife, recreation, or other resource values. Lands containing important elk habitat have been removed from the disposal category. Many parcels containing important habitat for deer, antelope, sage grouse, and other high interest species have also been removed from the disposal category. However, some public lands containing habitat for these and other species are still identified for disposal and will be considered in more detail case by case.

Legal access or the lack thereof was not used as a criterion for disposal. Small isolated parcels with legal access may be as difficult and uneconomic to manage as those without legal access, and the public use value may range from negligible to substantial. Legal access also can be of substantial benefit in the case of R&PP or other public purpose disposals. Again, a case-by-case analysis will provide a better basis for decisions regarding disposal or retention.

Exchanges have been assigned a lower priority than other realty actions within the BLM over the past few years, and this is not likely to change in the foreseeable future. Under the preferred management plan, eight areas are identified for which the BLM would actively pursue exchanges. Other exchange proposals can be initiated by interested parties. This approach presents a more realistic exchange program and concentrates our efforts in areas where the greatest public benefit can be

19A

THE STATE OF WYOMING

Game and Fish Department

CHEYENNE, WYOMING 82002

W. DONALD DEXTER
DIRECTOR

June 5, 1984

ED HERSCHLER
GOVERNOR

JUN 07 1984

EIS 2419
SIN 83-111
USDI/BLM Casper Dist.
Platte River Resource Area
RMP

Mr. Dick Hartman
State Planning Coordinator
Wyoming State Clearing House
2320 Capitol Ave.
Cheyenne, WY. 82002

Attention: Mr. Paul Cleary, SIN 83-111

Dear Mr. Hartman:

1 In response to the notification from your office, we have reviewed the DEIS for the Platte River Resource Area Management Plan. We feel that the overall document is extremely difficult to interpret and to detect which resources are going to be protected, altered, limited, eliminated, open for exploitation or simply ignored. We feel delineation of alternatives to be inconsistent between each of the Resource Management Units and the entire Resource Area. Analysis of impacts to fish and wildlife resources under the selected levels of management was often absent or only superficially addressed for many of the programs. We recommend that the document be revised and conflicting data and information be resolved before finalization. In addition to the overall effect of this management program on fish and wildlife resources within the resource area, the plan will effect the management of Wyoming Game and Fish Department Units at Table Mountain, Springer and Rawhide Units, as well as other lands in Platte, Goshute, Converse, and Natrona Counties. The following specific comments on the DEIS are offered in order of pagination of the document to assist in making the final document more complete and accurate in considering wildlife resources.

Page 13 - bottom left paragraph

2 We contend that lands which are critical to wildlife, have existing public access, or are adjacent to a large block of public land should be retained in public ownership. Land exchanges should be a high priority, so that management and public use are facilitated without loss of acreage. We would be glad to offer an analysis of impacts on wildlife on a case by case basis, as disposal or exchange is proposed on specific parcels.

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Mr. Dick Hartman
June 5, 1984
Page 2

JUN 07 1984

Page 17

3 We request the reference to Mr. Pate's comment be omitted. This comment was taken out of context and is not an official Department comment. The statement that the elimination of livestock grazing would have only improved 100 acres of riparian habitat is also felt to be questionable, particularly when it is stated on the same page that livestock grazing did not conflict with most critical habitat for deer and antelope.

Page 42

4 Perhaps the WGFD would be in a better position to manage the areas on the listed Units if title was transferred as suggested/perhaps not. These measures proposed in Alternative 2 to reduce the level of direct BLM management should be more completely evaluated.

Page 43 - upper left, first full paragraph

5 A policy of allowing sand and gravel extractions within 1/2 mile of riparian areas is not recommended. Each proposed sand/gravel pit should be reviewed by the BLM and Wyoming Game and Fish Department on a case-by-case basis to determine possible impacts to wildlife.

PAGE 45 - Grazing Management - Administration

6 Additional AMP's would probably benefit the wildlife and fisheries resource substantially by providing more information and monitoring of grazing practices.

Pages 46 & 51 - paragraph titled "Access"

7 Mention is made of 17 easements for public access over 38 miles of private land, but no locations are identified in the EIS. These locations should be identified. Page 307 lists proposed access areas but the total does not correspond to the 38 miles mentioned on pages 46 & 51. Without further details it is impossible to determine the value of these accesses, nor is it possible to suggest others without knowing the location of these.

Page 47 - Wildlife

8 Constructing goose nesting structures on river islands and shores at Rawhide may be feasible but perhaps undesirable due to the shifting nature of the river in the area. Mowing cattails and bulrushes in the area may also be cost ineffective, and more destructive of habitat diversity than desirable, as only minor acreages of cattail and bulrushes exist on the Rawhide Unit. No management plans have been completed to date for the area by the WGFD.

Comments and Responses

19C

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Page 3

Page 53

- 9 We note that 8 RMP's were dropped from the EIS. On page 216, notation is made that 5 of these 8 RMP's were dropped in areas of extensive big game habitat for which there is little opportunity to increase big game populations. We wish to stress that habitat improvement should not be based solely upon a need to increase population numbers. Consideration should be given to improving the wildlife habitat in all RMP's.

Pages 73 and 74

- 10 The remaining forestlands referred to as nonproductive lands or woodland areas for which little planning information is available should be protected until sufficient information is available for planning and management of those areas. While the majority of the resource area is grass or shrub/grass, these small areas or islands of woodlands provide habitat diversity and support wildlife species and therefore should not be considered unproductive nor unmanageable. With or without public access they still provide wildlife habitat and diversity and aesthetic appeal.

Page 77

- 11 Modifying livestock improvement projects to meet wildlife needs doesn't need stronger justification, in our opinion. We feel any modifications on or to the public environment should be conducted in the spirit of not affecting, at least seriously, the environment or any of the resources using that environment. All improvements do not necessarily need to be modified to benefit other resources. If modification will solve or mitigate a problem, then it should be considered on a case-by-case basis.

Pages 78 and 80

- 12 The range condition and trend information is, from our observation in the area, questionable. Improvement from poor and fair to good is possible and probable, although several areas of riparian habitat are in poor condition and not listed. However, the downward trends from the 1950's to the 1980's should also be explained in the text (i.e. the loss of areas in the excellent condition class). It may also be desirable to explain the difference, if any, in the method and nomenclature used. A discussion of what is not considered rangeland and whether or not riparian areas are considered rangeland would help clarify the situation, as would a discussion on the impacts of changes from sheep to cattle trends from the 1950's to the 1980's.

Page 85 - last paragraph under "Access"

- 13 Easement purchases and land exchanges are critical to accommodating increasing recreational demands, providing access to isolated public lands, and the reduction of conflicts between landowners and the public. Better

realized. Exchanges are very complex and costly. Therefore, the lands to be acquired by the BLM must have substantial potential for better federal land management and public use in order to warrant the expense. If you have any specific proposals in mind, we would be most happy to discuss them with you.

Internal BLM policies require that the Wyoming Game and Fish Department be notified of any land disposal action at least at the time a Notice of Realty Action or similar notice is published. In the PRRA, we have found it most advantageous to request input from the WGFD and from other federal, state, and local government agencies as early as possible in the disposal process. We encourage continued input in this manner.

3. The paragraph you mention has not been reprinted in the final document. We would like to point out that at this time competition between wildlife and livestock on public (BLM) land in this resource area has not been found to be significant.

The discussion of elimination of livestock grazing in relation to riparian habitat (page 17, column 2) indicates that improvement potential by this alternative was identified for only 100 acres of riparian habitat. The background discussion on conflicts between livestock grazing and big game in the next paragraph is intended to add to the riparian habitat discussion rather than to be contrary to it. The sum of livestock grazing/wildlife conflicts is 100 acres of riparian habitat, for which the improvement is discussed in the alternatives. Monitoring of these areas is proposed in the preferred alternative to determine if there is in fact a conflict.

When we said livestock grazing did not conflict with most critical winter habitat, we were speaking from the standpoint of joint use by livestock and big game during the winter use period. If you have any data or case examples in this resource area that documents a conflict, we would be pleased to be informed and to monitor those areas jointly and initiate action to alter the conflict.

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Mr. Dick Bartman
June 5, 1984
Page 4

- 13 signing, travel management, and monitoring would help to solve this on-going problem.

Pages 93 and 94 - Tables 3-24 and 3-25

- 14 There are no ruffed grouse in Platte County or blue grouse in Coshen County.

Page 122 - Affected Environment - Chapter 3

- 15 No discussion is presented on white-tailed deer. No mention is made of pronghorn or mule deer herds in Platte and Coshen Counties, where both currently exist.

A. Mule Deer

- 16 1. This document notes that Converse County contains three mule deer herd units, but the EIS does not name them nor identify them as it does for herd units in Natrona County. In the interest of continuity and clarity, we suggest they be identified.

- 17 2. Under Converse County, the statement is made "This herd unit contains little BLM managed land" with no explanation of which of the three herd units is being discussed.

- 18 3. Mention is made that the Lance Creek Herd Unit extends into part of northwestern Niobrara County. This is incorrect. Much of the Lance Creek Herd Unit is in Niobrara County.

- 19 4. The last sentence under Mule Deer reads "The best mule deer habitat in this herd unit is on the Thunder Basin National Grassland in Converse County." This statement is in error and should either be deleted or changed to read "The best mule deer habitat on public land in this herd unit...."

B. Antelope

- 20 1. The statement (Ormsby Antelope, Para. 2) "which contributes to forage overuse" should be deleted. There is no documentation to support this statement.

Page 124 - Rattlesnake Antelope

- 21 The statement "The objective of the Wyoming Game and Fish Department has been to keep this population low by using liberal hunting quotas," should be deleted. We do not consider a postseason antelope population of 12,000 animals to be a low population.

4. Cooperative management plans are being implemented on the Table Mountain and Bump-Sullivan Units. Cooperative management agreements are being considered for the Springer and Rawhide Units. The BLM evaluated transferring management of or disposing of the public (BLM) lands to the WGFD in these areas.
5. Alternative 3 was not selected as the preferred management plan. The BLM's preferred management plan is to continue to prohibit extraction of federal sand and gravel within 1/4 mile of the North Platte River. This would not apply to existing sand and gravel operations which had been permitted by the BLM in the past.
6. The BLM agrees that additional AMPs would benefit wildlife and fisheries. However, Alternative 1 was chosen as the preferred management plan because funding for range management is expected to be minimal during the next five to ten years.
7. Specific details on access easement locations have been omitted throughout the document. Access needs for the proposed management plan are presented in this final document by legal description.

Appendix B lists all the easements proposed for acquisition in Alternative 1 (see page 307, L4). BLM-administered public lands to be crossed have been omitted because the BLM does not need to acquire access across those lands. A map overlay is also available for review in the PRRA office. The preferred plan identifies the following areas for acquisition of easements: Corral Creek, Bates Creek

Comments and Responses

19E

Mr. Dick Hartman
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Page 5

Page 124

- 22 None of the antelope herd units in Converse County are named or identified in the EIS as they are for Natrona County.

Page 125 - lower right paragraph

- 23 There are no ruffed grouse in the Laramie Range.

Page 126

- 24 Legally, coyote and red fox are not classified as furbearers in Wyoming. Also, weasel and muskrat are included as furbearers under Wyoming Law.

Page 127

- 25 The last paragraph on this page discusses fishing on the major North Platte River reservoirs and states that the Bureau of Reclamation manages the reservoirs. The wording may lead the reader to believe that the Bureau of Reclamation manages not only the operation of the water but the fisheries as well. We would prefer it be clarified that the fisheries are managed by the Wyoming Game and Fish Department.

- 26 It also stated that fisheries management in these reservoirs is mainly on a "put and take" basis. The term "put and take" often connotes a fishery sustained by stocking of catchable sized fish, which is not the case in the North Platte reservoirs. The term "basic yield" more accurately describes the current management activities.

Page 128

- 27 We suggest a slight rewording in the discussion on Goldeneye Reservoir. Rather than use the word "poison" as a descriptor for rotenone we suggest the use of "suffocant" or "fish toxicant".

- 28 The third paragraph states that "stream fishing is limited in both quantity and quality". While this is true, the next sentence infers that BLM streams should not be managed. Though sections of stream on BLM may be too short to manage independently, they can be managed as part of the overall stream system. Due to the limited quantity of streams in the area, some short BLM segments are of greater importance and should be managed to the maximum extent possible.

Page 129 - Table 3-40

- 29 1. North Platte River also contains brown and Ohrid brown trout.
2. Alcova Reservoir also contains brown trout, Snake River cutthroat trout, walleye, and Ohrid brown trout.

Reservoir, Big Sulphur, Alkali Trail, Hitt Road, Horse Ranch, Canyon Creek, Kerfoot Creek (foot trail only), North Platte River parcels 1 through 6, parcel 8, and parcel 10, and Upper Laramie River.

8. The section discussed has not been reprinted in chapter 2 of the final document. The habitat modifications and improvements you mention have been implemented in the Table Mountain and Springer/Bump-Sullivan units through cooperative BLM/WGFD management. Construction of such modifications would be considered for the Rawhide Unit. If found feasible and desirable, these actions would be implemented through a cooperative management plan between WGFD and BLM. See Response 4 to Letter 16 for the status of management plans.
9. The discussion of 5 big game HMPs dropped from the original 16 proposed in past plans is on page 219 of the draft RMP, rather than on page 216. The BLM agrees that increasing populations should not be the only consideration for improving habitat. The criteria considered in ranking HMP areas were (1) public access, (2) quantity of public (BLM) lands, (3) opportunity to improve the habitat; that is, to modify or maintain the habitat, and (4) commonness of the habitat within the resource area. The 5 big game areas removed from priority consideration (Pine Ridge, Hartville Uplift, Walker Creek Ridge, Squaw Mountain, and Baldy Ridge) ranked lower than the 12 areas retained for plan development and implementation in the preferred management plan.
10. The terms "commercial," "noncommercial," "productive," "nonproductive," and "woodland" have specific meanings in forestry terminology. The first two are included in the Glossary. Others are defined below.

Productive Forestland is land that produces at least 20 cubic feet basal area per acre per year.

Nonproductive Forestland is land that does not produce at least 20 cubic feet basal area per acre per year.

Woodland is forestland that grows tree species but does not produce a forest product such as posts, poles, or sawlogs. Most woodlands do produce fuelwood.

The discussion you refer to treated these lands purely from a forest management standpoint. If we had planning data for these areas and we thought they could not be economically managed for forest products, we would have concluded that they had no value for the production of forest products and should be managed for other multiple use purposes. The BLM recognizes the value of isolated forest and woodlands for providing habitat diversity and supporting wildlife. Nonproductive forestlands are also valuable for forestry, recreation, and watershed. Under the preferred alternative for forestry, Alternative 4, these areas would be inventoried. A site-specific environmental analysis would be completed before cutting was begun in the areas.

11. We disagree in part. We have found that in some cases project standards for range projects don't necessarily meet wildlife resource needs when applied to specific range projects, and vice versa.
12. We have some information on the survey methods of the SCS 1965 Missouri River Basin Studies and the final product in terms of AUM carrying capacity and range condition. However, we do not have all the completed worksheets to show how the method was applied to the Platte River Resource Area. It appears that the methods

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Page 6

- 29 3. Pathfinder Reservoir also contains walleye and Ohrid brown trout.
4. Goldeneye Reservoir no longer contains Ohrid brown trout.

Page 129 - bottom of left column

- 30 Marsh hawk and harrier are the same bird. Also include screech owl, short-eared owl, barn owl, turkey vulture, rough-legged hawk, saw-whet owl in the next sentence.

Page 139

- 31 As mentioned above we would prefer the word poison not to be used to describe the rotenone in Goldeneye Reservoir. We suggest that in this case "poisoning" be replaced by "removal".

Page 168 - lower left paragraph

- 32 The climate and tree species make it highly unlikely that beetle-killed snags would fall as soon as stated.

Page 168 - second paragraph from top of right-hand column

- 33 We are unaware of any documentation that clearcuts in ponderosa pine woodlands improve blue grouse habitat.

Page 170

- 34 We would recommend that the Buffalo Creek drainage be included in those areas where forage will be reserved for elk on critical winter ranges, if at all possible.

Page 170-71

- 35 We suggest the paragraph concerning controlled burning mention inter-agency cooperation in planning and burning on critical habitat areas. We assume that BLM and Game and Fish Department would cooperate fully in prescribed burning to eliminate any adverse impacts on wildlife.

Page 171

- 36 In the first paragraph, "----it is assumed the PRRA wildlife biologist----" should be amended to read that "it is assumed that the PRRA wildlife biologist----" and provisions should be made to have full and complete consultation with WGFD personnel on such projects.

- 37 In the first full paragraph in the right-hand column. Any fencing, whether done under this or one of the other alternatives, should be constructed to the Wyoming Fencing Task Force specifications.

Comments and Responses

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June 5, 1984
Page 7

Page 185

- 38** The conditions under which the buffer zone around sage grouse leks would be waived for oil and gas development need to be clarified.

Page 186 - Conclusions, 2nd paragraph

- 39** The reference to "burgeoning big game populations" should be deleted. This paragraph should also be re-written to state that wildlife habitat improvement is also important in areas where big game populations will not be increased.

Page 189 - first paragraph under "Effects on Wildlife" in upper right-hand column

- 40** We suggest the authors include the vast array of other wildlife species that could potentially be effected through the development of sand and gravel sites along the North Platte River.

Page 200 - first paragraph in upper right-hand column

- 41** Under certain circumstances and in some areas, fencing in riparian areas should be permanent to insure that these areas are improved and protected on a long-term basis.

Preferred Management Plan - Chapter 5

- 42** In the discussions of the Energy and Minerals, Fire, Forest and Grazing Management programs in this chapter, as well as in Chapter 4, the effects on fisheries resources were not addressed. The type and extent of management for these programs would have varying degrees and types of impacts on aquatic systems and the identification and examination of these impacts is needed if the environmental analysis is to be complete.

Page 215 - Energy and Minerals

- 43** We concur with selection of Alternative 1 for this program, as it would maintain at least a 1/4 mile restriction along the river for sand and gravel extraction. From the stand point of fisheries resources in the river this is the preferred alternative.

Page 215 - Fire Management

- 44** Implementation of Alternative 3, as recommended in this section, could result in an increased water yield of up to 15% on burn areas (page 198). The potential for water quality degradation from increased erosion and consequential sediment input due to this increased water yield to streams should be addressed. Though these impacts may be fairly negligible, we feel they should be analyzed in the EIS.

for the MRB surveys were very similar to those used by the BLM in recent surveys. The SCS started using local "range site guides" as early as 1945, as indicated in Dyksterhuis, "Condition and Management of Range Land Based on Quantitative Ecology," *Journal of Range Management* 2 (July 1949).

These guides were formulated on basically the same principles as guides now used by the SCS. They were based on soils, precipitation zones, vegetation designated as increasers, decreasers, or invaders under grazing pressure, and the percentage of composition by weight of each plant species compared to composition found in climax plant communities. Our inventory crews used the updated SCS range site guides to determine range condition. For a description of guides and procedures, refer to BLM Manual 4412, "Physical Resource Studies," and the SCS "National Range Handbook" and "Range Site Guides." On the new surveys, riparian areas were shown separately if they were larger than 25 to 30 acres. Smaller areas were often shown as "inclusions" within larger range sites. These inclusions would show up as a percentage of the total range site but were not mapped separately.

We can only speculate on the reasons for the reduction of range condition from excellent to good. It could be that at least part of the difference is attributable to normal errors between surveys done by different people. We don't believe that much of the difference could be tied to riparian areas, since these areas are such a small percentage of the total area surveyed. Old grazing lease records do not contain the detailed information we need to assess the effects of historic changes from sheep to cattle. Likewise, historic patterns of use, game distribution, and quality of forage for various wildlife species and their habitats are not available.

13. We agree. The preferred management plan identifies 8 areas for exchange and 17 easements for acquisition to reduce the problems identified and to enhance public recreation. Additional exchanges and cooperative access agreements initiated by the public would further reduce these problems. As in the past, we will consider cooperative agreements in any area in which they could relieve public use conflicts and meet landowner concerns.

14. These data are taken from WGFD *Annual Report of Upland Game and Furbearer Harvest*. The 1979 data came from pages 28 and 29, the 1981 data from pages 29 and 30. Data for blue and ruffed grouse are combined in these tables.

15. To keep the document brief, we have discussed only the species of major importance and those for which there is opportunity for habitat management. White-tailed deer make up a minor proportion of big game in the resource area on public lands. Similarly, the quantity of BLM-administered lands and management capability for these species in Platte and Goshen counties is limited. While public land may be of some importance to big game herds there, the area we manage is small in comparison to that in Natrona and Converse counties.

16. The three mule deer herds in Converse County are the South Converse, Lance Creek, and Bill herds.

17. The South Converse herd unit is the one being described.

18. This sentence has been changed to read "... which extends into Converse County from Niobrara County."

19. This sentence has been changed as you suggest.

20. We disagree that the statement is in error. It was a professional judgment based on the density and condition of vegetation in the area (blue grama, cheatgrass, brome, prickly pear, and silver sagebrush).

19H

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Page 215 - Forest Management

- 45** The selected alternative for this program is Alternative 4: High Level Management. As stated on page 207 - "This would result in soil erosion and increased potential for siltation of streams." The impacts to fisheries resources as a result of this increased erosion and siltation is not addressed, however. A commitment to timbering practices designed to limit erosion and stream siltation would help to alleviate impacts on aquatic environments.

Page 247 - last paragraph in right-hand column

- 46** Wildlife management objectives appear to be very limited. Because of the high value of riparian habitats associated with the North Platte River, efforts should be made to improve and protect these habitats.

Page 251 - Muddy Mountain RAMP

- 47** The six miles of easements on Muddy Mountain for snowmachine trails could lead to a serious conflict with elk wintering on the east end of this mountain. For this reason, we do not believe snowmobile use on elk winter ranges should be encouraged. We are concerned about the design of 8 1/2 miles of fence around the EEA on Muddy Mountain, and recommend it be constructed to allow big game movement.

Page 256

- 48** The statement is made that BLM would manage beaver on the Bolton Creek Aquatic RMP. By statute, the management and transplanting of beaver rests with the Wyoming Game and Fish Department. We look forward to cooperating with BLM in beaver management under this RMP.

Page 264 - "Lands" category in right-hand column

- 49** We recommend the BLM actively pursue obtaining legal access to large blocks of public lands which, at present, are not accessible. These lands include, but are not limited to Squaw Mountain, along the Laramie River on Platte County's west boundary and in the Cabin Creek area.

Page 267 - "Wildlife"

- 50** We recommend the BLM take an even more active role in management and monitoring the use of public lands under their jurisdiction to increase the quality of habitat, particularly the improvement of riparian habitats.

Page 271

- 51** See comments relating to pages 47 and 53.

Comments and Responses

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Mr. Dick Hartman
June 5, 1984
Page 9

Page 272

- 52** It is stated potential burro treatment totals 41,000 acres. However, the document only addresses long-term brush control for 19,975 acres in the summary. We are unsure of the correct total.

Page 274

- 53** We recommend trend transects be established in all allotments, as soon as possible, to avoid further delays in proper management. Stock drive ways should be monitored for 5 years prior to issuing supplemental use leases, in order to be consistent with policy on other public lands.

Page 279 - second paragraph of left-hand column

- 54** No extensive prairie dog poisoning programs should be initiated on BLM lands in this RMO, prior to surveys being conducted to determine if black-footed ferrets and burrowing owls are present. Prairie dogs are strongly associated with these two species. Burrowing owls are present throughout this RMO and there are historical records of ferrets occurring within it. Any poorly planned prairie dog eradication could jeopardize the future of these two species.

Page 279 - "Lands"

- 55** We recommend BLM consider retaining in public ownership, lands that are of significant value to wildlife. Access to isolated parcels through easements, land trades, etc., should be pursued. We believe it will be increasingly important in the future to provide recreational opportunities for the increasing population in this portion of Wyoming. Adjacent lands administered by other public agencies should be considered when determining the value of BLM lands. If each agency considers only its own land when assessing its value, the importance of this land may be grossly underestimated. Coordination between the BLM, USFS, BUREC and Wyoming State Land Board should be initiated in considering lands for retention or disposal.

Page 306

- 56** We recommend that no stock driveways be abandoned if they could legally be used as access to public lands.

Page 313 - second full paragraph in upper right-hand column

- 57** Legal public access to Squaw Mountain should be a high priority.

Page 350 - Appendix B - Criterion 15

- 58** A. We would ask that monitoring of sage grouse leks be coordinated between the lessee, BLM, and WGFD personnel.

19J

Mr. Dick Hartman
June 5, 1984
Page 10

- 59** B. Attempting to determine if 30% or more of the sage grouse population that uses the monitored lek is found to nest on the leased area would require an extensive research project. In lieu of this, we recommend that the pre-disturbance vegetation be restored within two miles of all active sage grouse leks.

Page 357

- 60** No data is presented for mule deer, pronghorn, elk, or white-tailed deer herds in Platte and Goshute Counties.

Page 357 - Appendix J - Table J-1

- 61** Herd unit population objectives presented here need to be updated.

Page 358

- 62** We are unsure what units are being used in this table.

GENERAL COMMENTS

- 63** A. We would prefer controlled burning to chemical control for use in shrub control.

- 64** B. All fencing projects proposed need to be identified, and design and location should be coordinated with the WGFD.

- 65** C. Additional sage grouse leks and golden eagle nests have been located since Map 19 was printed. The final EIS should be updated to include these new locations.

- 66** D. Because of the material that had to be covered in this document, the format made it difficult to evaluate alternatives. Many projects and their locations were not stated specifically enough to permit specific comment.

In some cases, we do not agree with the alternatives selected as preferred. We have selected the following alternatives as most beneficial to fish and wildlife resources:

Category Alternative

- | | | |
|-----------|--------|--|
| 67 | Fire | 3 (provided potential water quality degradation is addressed) |
| 68 | Forest | 3 (provided a commitment is made to timbering practices designed to limit erosion and stream siltation and to alleviate impacts to aquatic environments) |

21. This sentence has been changed to read "... keep this population within objectives by using liberal hunting quotas."
22. The antelope herds in Converse County are the Bear Creek, Boxelder, LaBonte, Lance Creek, and Sage Creek herds.
23. Although field sightings of ruffed grouse are classified as unconfirmed, WGFD field staff say that there is a high probability that ruffed grouse do exist in the area.
24. To be consistent with Wyoming state statutes, we have noted that the coyote and red fox are not classified as furbearers and that the weasel and muskrat are furbearers.
25. This paragraph has been changed to show that the Bureau of Reclamation operates the water flow of the large reservoirs, the county manages the public recreation areas, and the WGFD manages the wildlife and fisheries.
26. The part of the last sentence has been changed from "put and take" to "on a 'basic yield' program, through which fingerlings are planted."
27. The term "poison" has been changed to "suffocant."
28. The inventories done in 1981 and 1982, which were dry years, did not lead to recommendations for fisheries HMPs. However, the BLM will consider proposals for specific stream segments or for a number of stream segments if WGFD recommends those for more intensive management.
29. Table 3-40 has been revised to include your information.
30. This sentence has been corrected to show that the marsh hawk is the harrier. The second sentence was not intended to list all nesting raptors in the resource area; only some of the representative raptors were mentioned.
31. The wording has been changed as you suggest.
32. It is the professional judgment of the writer (Herold), who has experienced 10 years of mountain pine beetle control in the south Big Horn Mountains (1958-1968) and 30 years of forestry work in the Casper area, that five to ten years is a reasonable period of time for beetle-killed trees to stand before toppling. Also, please see Bull's (1983) report of snag longevity in northeast Oregon, where climate is similar. That report indicated that 50% of ponderosa pine and 38% of lodgepole pine snags remained standing eight years after being killed by the mountain pine beetle (the Bull report is listed in the "Added References" list). We recognize that certain factors need to be considered in determining how long a beetle-killed tree might remain standing, including the diameter at breast height, the number of beetles attacking the tree, and the extent of the blue stain fungus and its depth of penetration. The upper weight of the canopy also could be a factor. We believe five to ten years is a reasonable time to expect beetle-killed trees to remain standing.
33. The first sentence of this paragraph has been changed to two sentences as follows: "Forest management can improve the diversity of lodgepole pine stands through small clearcuts and thinnings and of ponderosa pine stands through selective cutting. Both types of changes increase openings..." Thus, clearcuts would not be done in ponderosa pine stands.

Comments and Responses

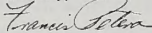
19K

Mr. Dick Hartman
June 5, 1984
Page 11

69 Grazing 1
70 Loads 1 (with added emphasis on access to public lands)
71 Recreation 3
72 Wildlife 4

73 Contact this office or our Area Fisheries Office or District Game Division Office in Casper if we may be of further help on this project.

Sincerely,



FRANCIS PETERA
ASSISTANT DIRECTOR
OPERATIONS
WYOMING GAME AND FISH

FF:HBM:sac
Copy To: Game Division
Fish Division
R&D Division

34. Reservation of forage for elk was identified in Alternatives 1 and 2 of the grazing program. Analysis indicates that the potential exists for a problem, but none could specifically be identified. The preferred plan (RMU-1, Grazing) states that BLM would monitor elk-livestock conflicts in the areas over a five-year period. If monitoring should indicate a problem, action would be initiated to resolve it.
35. Standard procedures from the WGFD/BLM cooperative agreement require our coordination with WGFD before such actions are implemented.
36. The paragraph in question has been removed. A new sentence has been added to the preceding paragraph, as follows: "Extensive prescribed burns and sagebrush spraying would not be conducted in deer and antelope critical winter ranges." If any such activities were to be conducted, the PRRA wildlife biologist would participate in the planning. Consultation with WGFD is discussed in Response 35, above.
37. The final RMP/EIS indicates that we will use the statewide BLM/WGFD Task Force specifications (which are the same as BLM Manual 1737 standards) for all fences in antelope habitat, except in extraordinary circumstances. We think the burden should be on the grazing lessee to prove that the standard antelope fence will not provide the necessary control for livestock, and we would consult with WGFD to determine whether an exception could be considered.
38. Reasons for waiving the provision for the buffer zone might be (1) a lek has been inactive for several years, or (2) a portion of the buffer zone of a lek lies near an often-used road and there is no nesting vegetation.
39. The paragraph you mentioned has not been repeated in the final RMP/EIS since it appeared in the description of an alternative other than the one selected for the proposed management plan. We agree that improvements in big game habitat may provide benefits other than increases in the number of animals.
40. The list of species that could potentially be affected by from such an action would be quite lengthy, including mammals, birds, fishes, reptiles, and amphibians. More severe impacts would occur where riparian vegetation occurs. We feel the impacts of this alternative are adequately addressed. The alternative for extracting sand and gravel within ¼ mile of the Platte River was not selected in the preferred management plan.
41. Under this alternative, temporary enclosures would be built with grazing funds (range improvement project funds) to improve forage for livestock. Any enclosures built with wildlife funds generally would be permanent, and we are not implying that riparian enclosures are not excluded from long-term protection.
42. Detailed impacts are not discussed because the activities of these programs would have few or no effects on the fisheries resources or on the aquatic systems. Any proposed activities would be analyzed in a site-specific environmental analysis on the proposed harvest area, and mitigating measures would be required to eliminate or reduce any adverse impacts. We have added a statement to the introduction to chapter 4 indicating that if effects are not discussed it is because there would be no important effects.
43. See Response 1 to Letter 1.

44. We have addressed the potential of prescribed fire to cause short-term sedimentation of water sources (under "Short-Term Use versus Long-Term Productivity" and under "Unavoidable Adverse Effects," page 166). We did not include a discussion on page 215 because, as you say, impacts are negligible. Regarding the 15% water yield, we received a comment from the BLM Wyoming State Office that conflicts with your estimated percentage of potential water yield on rangelands. That comment is as follows:

Several pages state that a 15% increase in water yield would occur on some burns. This is misleading and almost never occurs on rangelands. A recent paper (Hibbert, A.R., 1983. Water yield improvement potential by vegetation management on western rangelands. Water Resour. Bull. 19:375-181) states that no increase will occur on sites that receive less than 15-18 inches precipitation/year and any increase that does occur will be under extremely unusual rainfall conditions. We feel for the above response it would not only be misleading but inaccurate to suggest measurable impact on erosion and sediment yield. We are currently collecting data on sediment loads before and after burn treatment to evaluate any potential problem.

45. BLM-administered public lands in the PRRA include approximately 61 miles of stream and 8 small reservoirs that contain game fish (information from PRRA Unit Resource Analysis III). The major activities that may affect fisheries habitat on these public lands or on private lands downstream are forestry, realty (primarily pipelines), grazing, and oil and gas development. Private fisheries resources might also be affected by oil and gas development where the BLM permits activities on split estate. However, the standard stipulation (SWA 2, page 309 of the draft RMP/EIS) prohibits development within buffer zones of permanent and intermittent waters. We feel this essentially eliminates impacts on fisheries from these programs.

Effects on water quality are discussed for each of the programs in this final RMP/EIS. It is understood that where water quality is changed, fisheries habitat is likewise changed.

46. The BLM's management opportunities for wildlife habitat on the North Platte River are limited because of the surface ownership. We have directed our management at specific tracts of public land along the river (nine tracts upstream from Casper and ten downstream). We do intend to protect riparian habitat as much as is possible in those tracts. (The upstream tracts are the Trappers Route canoe landings.) Several parcels downstream are proposed for HMP development cooperatively with the WGFD Rawhide Unit. The BLM would appreciate suggestions for improvements on other specific parcels.
47. Both the BLM and the WGFD recognize the significance of the critical elk winter range on Muddy Mountain. With proper planning, enforcement, and monitoring, management of Muddy Mountain for elk and recreation use, including snowmobile use, is achievable. Special antelope fences would be required because this area is not recognized as an antelope area. A 40-inch, four-strand barbed wire fence is not expected to hinder the movement of other big game. The WGFD would be consulted before fencing projects would begin on the Muddy Mountain EEA.
48. The passage has been changed to read: "The WGFD manages wildlife populations (including beaver), and the BLM manages wildlife habitat on BLM-administered public lands in cooperation with WGFD".

Comments and Responses

49. Proposed easements to the Upper Laramie River and Squaw Mountain were identified in Alternative 1. However, under the preferred management plan, the Squaw Mountain easement would be dropped because no management plan for the area is proposed. Providing public access to an area without adequate management could result in many of the problems we are trying to resolve, including trespassing, vandalism, road damage and erosion, and littering.

Acquisition of access to the Upper Laramie River is still proposed in the preferred plan; however, two landowners have specifically objected to this easement. Therefore, acquisition of access in this area will have one of the lowest priorities.

The Cabin Creek area appears to have at least reasonable access at the present time; therefore, BLM action to acquire an easement would not be warranted. The Canyon Creek easement would provide additional public access into this general area.

50. We agree that riparian habitats are significant for wildlife in the resource area. The BLM conducted inventories in 1981 and 1982 to map these riparian areas and describe their conditions. Improvements are being proposed in the preferred plan for riparian habitats in allotments. Others will be monitored to ensure that their productivity and their availability to wildlife is maintained.
51. See Responses 8 and 9 to this letter.
52. The 41,000 acres is an estimate of the amount of sagebrush of sufficient density conducive to burning in the resource area. The 19,975 acres is what appears to be economically feasible for treatment on "I" and "M" category range allotments. Once better information has been gathered on site-specific project proposals, the total treatment acreage may change.
53. We are developing plans for range studies, particularly on "I" category allotments. We disagree that stock driveways should be monitored for five years before supplemental permits are issued. Supplemental permits are not long-term permits; they are issued annually if forage is available in the stock driveways and other resources would not be affected.
54. This management decision does provide for prairie dog control, but an extensive program would not be implemented. Surveys would be conducted for black-footed ferrets and burrowing owls. No control would be practiced in towns where evidence of those species is found.
55. See Responses 6, 7, 13, and 49 for this letter.
- Several parcels have been removed from the disposal category because of adjoining state lands or other federal lands. This is mostly true where a public land parcel adjoins a large parcel of state land. However, some parcels of public land that adjoin a small parcel of state land are still identified for disposal and will be considered further on a case-by-case basis. The use of case-by-case analysis and input from federal, state, and local government agencies before any land disposal action should reduce or eliminate disposal of any parcel that contains important wildlife habitat.
56. The decision to revoke unused stock driveway withdrawals has already been implemented. These withdrawals do not provide public access across private lands, and the withdrawal has been removed from all private lands. Almost all of the remaining stock driveway withdrawals parallel or overlap county roads and are legally accessible. Lands will remain in federal ownership even if stock driveway withdrawals are canceled; therefore, they are open to use by the general public.

Comments and Responses

57. See Response 1 to Letter 4 and Response 9 for this letter.
58. We agree that this coordination is necessary, and it will continue as in the past.
59. Your suggestion is helpful. Restoration of all the pre-disturbance vegetation as you describe probably would be more effective.
60. See Response 15 to this letter. The draft did not address those counties because the quantity of public land is small in comparison to private lands, and the public land provides little support to the herds.
61. The final Strategic Plan objectives will be included in the resource area's data base.
62. The table in appendix J defines riparian habitat in acres.
63. The BLM will consider all brush control methods for each site in turn. We agree that burning would provide a mosaic pattern of remaining brush patches, which are advantageous to wildlife. The range staff included chemical control as an option for areas where burning might not be feasible.
64. All range improvement projects (including fences) are coordinated with the WGFD case by case as they are proposed and designed.
65. Map 19 will not be reprinted at this time, since new leks and nests are continually being found. The new data will be added to our maps on file so that map 19 could be reprinted if a significant amount of new data should be obtained.
66. The range improvement project maps show the allotments in which projects are planned. Specific projects are discussed with WGFD each year.
67. Alternative 3 was selected as the preferred management plan for fire.
68. Relative to wildlife, the advantages of the preferred alternative (4) to Alternative 3 for forestry are as follows:

Mountain Pine Beetle Control: Alternative 4 would include control in the buffer zones (1,200 acres in Little Red Creek and 1,000 acres in Jackson Canyon), without which the roost areas would be reinfested from these buffer zones.

Annual Harvest: The increased harvest (750 mbf) allows for thinnings in these bald eagle habitats to reduce the susceptibility of the stands to pine beetle infestations. The reduction of trees per acre (to approximately half the trees now standing) should reduce the cost of treating actual infested trees.

Annual Harvest on Muddy Mountain: Beetle infestations have recently become a major problem in the Muddy Mountain Environmental Education Area. Increased harvest is proposed as the method of reducing the infestations, improving the vigor of remaining trees, and regenerating seedlings.

Alternative 3 is more a regimen of harvest, providing for little or no attention to other areas of forest management such as inventory, planning, and attention to nonproductive forestland. Alternative 4 would maximize timber harvesting, bring productive forestland under intensive management in a shorter time, and reduce the loss of usable forest products to pests and diseases. It provides for maintenance of stands once they are brought under management in order to promote a younger, healthier, and more vigorous stand. Management implies promoting the greatest yield in the shortest time from the resource present. The alternative indicates fewer entries into the stand in the long term, and thus fewer disturbances.

Comments and Responses

Alternative 3 would restrict beetle control to major forest areas around Casper, whereas Alternative 4 would allow for control as needed on all forestland. Control of insects and disease is a basic part of forest management.

Alternative 3 is restrictive to thinnings, whereas Alternative 4 provides for thinning as needed. This would allow for thinnings on a larger amount of land and would cause fewer entries into a stand in the long term. Thinning is a recognized tool of forest development and provides for the greatest growth of properly spaced trees in the shortest time.

69. Alternative 1 is the preferred alternative for grazing, except for range improvement projects, where we plan to implement a more aggressive program in the short term.
70. We disagree in some areas with your selection of Alternative 1 for lands, since it would result in several problems within the following programs.

R&PP: We have reevaluated Alternative 1 and Alternative 4, and we have changed our selection from Alternative 3 to Alternative 4. This alternative specifically identifies the Esterbrook parcel and the parcel adjacent to the Converse County Park for disposal only under the R&PP Act. We think this is important in increasing public purpose use on these tracts. Also see the rationale for selecting the preferred alternative on page 216 of the draft.

Exchanges: Alternative 4 provides an exchange package that is reasonably consistent with current and anticipated funding. Alternative 1 presents a maximum exchange package and is unlikely to be accomplished. Alternative 1 also includes many exchange areas that would provide few or no public benefits or improved federal land management opportunities.

Other Disposals: Alternative 1 would limit land disposals to Converse County (26,400 acres), Platte County (80 acres), and Goshen County (2,500 acres). This could create a substantial impact on a single county and limit or preclude disposal opportunities in the other counties. Alternative 1 also would virtually exclude disposal by sale, which is the simplest and most economic means of disposal and, for many of the identified parcels, the only practical means. This would require continued management by the BLM, which is costly and difficult on many of these parcels and reduces the effort that can be expended on more manageable parcels.

Withdrawals: Alternative 1 under withdrawals includes proposed withdrawals for several areas that do not meet the established withdrawal criteria. This is contrary to current BLM policies and would limit opportunities for mineral development in many areas.

Corridors: Alternative 1 includes the preference to use several existing corridors that are no longer practical or of which the use would not be in the public interest. In particular, this alternative would require continued use of the North Platte River and the Oregon Trail Road as corridors. This could result in long-term and possibly irreversible impacts on several resource values in these areas. The preferred plan eliminates two corridors that are not needed and do not meet the criteria for corridor designation. The North Platte River corridor would be eliminated to preserve and enhance the resource values in that area. The Oregon Trail corridor would be moved away from the trail to preserve the remnant wagon ruts and provide a new area for utility rights-of-way. Four other existing corridors would be designated. Corridor designation is a very useful management tool that can benefit agencies such as WGFD and the USFWS, since it

Comments and Responses

limits construction of most major rights-of-way to a common use area rather than allowing facilities to be placed at random. This confines the impacts associated with construction of such facilities to a smaller area.

Access: Alternative 1 identifies 48 roads for easement acquisition, many of which are unneeded or would provide only minimal benefits at a considerable cost. The preferred plan presents a more reasonable access package, identifying easements in areas with high public use or high demand. This package is also in line with anticipated funding for easement acquisition and road maintenance.

71. We agree, and this alternative was included in the draft originally as the preferred alternative for recreation.
72. We agree, and this alternative was included in the draft originally as the preferred alternative for wildlife.
73. Thank you for your interest and cooperation.

Responses to Letter 20

1. We do not agree. The decisions in our preferred alternative were based on data collected as follows: four summer field seasons were spent preparing detailed mapping and on-site field inventories of range improvement projects on each allotment. In addition, wildlife specialists spent two summers inventorying riparian habitat and two summers collecting information on special habitat features. Soils were mapped and classified for almost all of Natrona County and major parts of Converse, Platte and Goshen counties.

The 500,000 acres of range condition mapping is significant, especially since this work was done in the areas that had been identified as having the highest probability for potential resource conflicts. Range conditions in the area were determined according to standard SCS methods and range site guides. This method compares existing plant communities with plant communities found under climax conditions. (Additional details may be found in BLM Manual 4412, "Physical Resource Studies," and the SCS "National Range Handbook" and Range Site Guides.)

All 407 grazing lessees were consulted regarding their ranching operations, their needs for range improvement projects, and the category in which each allotment was placed.

2. "Grazing Management" is one of several headings under "Issues." We talk about "management changes" on pages 12 and 13 of the draft. A management change would be any change that would solve a problem, not necessarily only livestock adjustments. The only sentence that would imply that livestock adjustments are the only activity planned is the one that refers to livestock overuse of riparian or subirrigated areas.

20A



WYOMING
EXECUTIVE DEPARTMENT
CHEYENNE

TO: HERSCHLER
GOVERNOR

MEMORANDUM

TO: Paul Cleary
FROM: Rod S. Miller *RM*
DATE: June 4, 1984
SUBJECT: Comments on Platte River RMP

1. 1.4 million surface acres are considered in this document. However, range condition information was collected on only 500,000 acres. This does not appear to be an adequate survey on which to base grazing management decisions. Also, the methodology employed during the survey is not discussed. This issue is discussed on page 9 of the draft.
2. On page 12 and 13, under Grazing Management, the reference is that livestock grazing will be the only activity singled out for adjustment if a multiple-use conflict occurs. This has been an underlying theme in all DEISs that I've seen, and there is no justification for it. Again, on page 50, under Grazing Management, there is an inference that if livestock values increase they must do so at the expense of other resources. Segregating one trophic community from the rest of the ecosystem is not a realistic approach to resource management.
3. Clarification is needed on page 77 within the discussion of range improvement maintenance. What criteria are being applied to determine who is the "benefitting user" of a range improvement? A suggested criterion would be number of animals using an improvement multiplied by the number of days of use.
4. The analysis of the access problems associated with the Recreation Management component of the Affected Environment is incomplete. It adequately identifies the scope of the recreational access problem, but proposes no management options other than pursuing the feckless cooperative access agreements. This portion of the document would be improved with a discussion of innovative management techniques, such as stewardship.
5. The commentary on Endangered Species in the Wildlife Section of the Affected Environment on page 121 is very questionable. Any time I see a citation from a Clark and

Comments and Responses

20B

Memorandum
Paul Cleary
June 4, 1984
Page 2

5 Stromberg study, I am immediately skeptical. This data should not be used without an analysis of controversy since these gentlemen don't enjoy a wide reputation for accuracy and objectivity. The claim that ferret remains were found in Carbon County is true, however, it has not been positively determined that the remains were that of Rosencrans Black Footed Ferrets.

6 In addressing the preferred alternative for Grazing Management, I will say that in general I agree. However, I would like to see more emphasis on a monitoring program to expand the database in the PRRA. In view of the controversy involving prairie dog management in the Thunder Basin National Grassland, the BLM may be well advised to consider this potentially serious conflict in the Preferred Alternative here.

tm

The National Environmental Policy Act requires that an EIS show a "range of alternatives." The Natural Resources Defense Council and BLM policy both indicate that alternatives for "increased grazing" and "decreased grazing" must be considered. Because of these requirements, some of our alternatives do favor one resource over another. Management actions in Alternative 2 could favor wildlife and watershed resources; actions under Alternative 4 could favor livestock resources. Alternatives of this type could easily be interpreted as a tendency to give some resources higher priority than others. The management decisions recommended in the preferred plan attempt to achieve the best balance of multiple use and sustained yield for all resources.

3. The BLM's range improvement policy says that "parties deriving the primary benefit from a structural improvement shall be responsible for maintaining that improvement. Primary benefits constitute more than 50 percent of the benefits realized."
4. We do not agree that all access agreements can be labeled ineffective. Providing access across private land to BLM land depends on a cooperative landowner, regardless of whether the transaction is called an "easement," a "cooperative management agreement," or "stewardship." All parties involved must be willing to work at the program upon which they decide. There may be little incentive at this time for a rancher to grant public access across private land through the stewardship program; however, we have in the past been able to assist landowners in dealing with their concerns as well as ours through such agreements.

The access issue is considered under the lands program as well as under recreation. Under the preferred management plan, 17 easements would be acquired to enhance public recreation opportunities. Cooperative access agreements also would be used.

The use of a stewardship program (wherein ranchers are designated as "stewards" to manage certain parcels of public land) does not appear to be of any benefit in improving public access unless a landowner were to open private lands in conjunction with public lands. It does not appear that stewardship has any more utility than you perceive from cooperative access agreements. Few problems would be present if landowners were agreeable to such an arrangement.

5. We believe that the commentary on endangered species (bald eagle and black-footed ferret) is a good summary of their status in the resource area. Articles written by Clark have been reviewed by the scientific community and published in that literature; thus, we consider them acceptable as references. Your comment about the remains being that of "Rosencrans Black Footed Ferret" is difficult to respond to since the recovery plan for black-footed ferrets is based on the species level, not on a subspecies level.
6. Unlike the Thunder Basin National Grassland, the public lands managed by the BLM in the PRRA do not contain a large acreage of prairie dog towns. We do not anticipate a large program of control such as has been proposed for the Thunder Basin National Grassland.

Comments and Responses

21

State of Wyoming Oil And Gas Conservation Commission

GOVERNOR ED HESSLER, Chairman
COMMISSIONERS
OSCAR E. SWAN GARY S. GLASS RICHARD S. CRISS BEN WHITTAKER
STATE OIL AND GAS SUPERVISOR
DONALD B. BASCO

April 4, 1984

Mr. Dick Hartman
State Planning Coordinator's Office
Wyoming State Clearinghouse
2320 Capitol Avenue
Cheyenne, WY 82002

Re: The Platte River Resource Area, RMP

Dear Mr. Hartman:

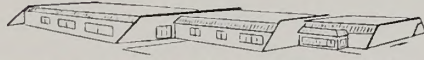
In response to your referral of the above-noted Resource Management Plan Draft Environmental Impact Statement, this is to advise that the matter of oil and gas activity has already been evaluated and is included in Appendix G. The conclusions reached in Appendix G are more or less stipulations that operators will have to adhere to in conducting oil and gas operations.

1 For the most part, the requirements are consistent with what the BLM requires in most other places in the State on Federal lands, to which I have no objection.

Very truly yours,

Donald B. Basco
Donald B. Basco,
State Oil and Gas Supervisor

DBB:wai
Enc.



777 WEST FIRST STREET P.O. BOX 2840, CASPER, WYOMING 82002

(307) 234-7147

Response to Letter 21

1. Thank you for your comment. We appreciate your support.

22



Commissioner of Public Lands and Farm Loans

2424 PIONEER AVENUE
PIONEER BUILDING

CHEYENNE, WYOMING 82002

May 4, 1984

PLEASE ADDRESS REPLY
TO THE COMMISSIONER

Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

Reference the Draft Resource Management Plan/Environmental Impact Statement (RMP-EIS) for the Platte River Resource Area we offer this comment.

1 Regardless of the Alternative selected and the composition of high priority or limited fire suppression zones a possible conflict may exist between the BLM definition of expensive fire protection and that of the County volunteer system involved. BLM's limited fire suppression resources and extensive travel times often conflict with the disbursed nature of County fire units with minimum travel time to all parts of each county. Thus, when County volunteers take fire suppression action on BLM ownerships it is often considered nothing more than routine action because of their availability; whereas BLM may consider it a major effort to take action. Because of this situation any change from current policy needs to be personally presented to the County Fire Warden in the affected counties of Natrona, Converse, Platte, and Goshen, with a similar briefing given Wyoming State Forestry Division District Forester R. I. Munitz.

Thank you for the opportunity to review the draft and to comment.

Very truly yours,

CARL E. JOHNSON
STATE FORESTER

By: *Bryce E. Lundell*
Bryce E. Lundell
Asst State Forester

BEL:eb

Response to Letter 22

1. The Platte River Resource Area agrees with the recommendation of personal involvement of the county fire warden(s) regarding any changes in fire suppression actions that may be planned for their respective counties. The county volunteer system is one aspect of the counties' fire suppression capabilities. We find it difficult to maintain current information from one year to the next regarding what plans and actions are planned by individual counties until a wildfire situation arises and one entity meets the other on the fireline. As the draft document implies, a special effort will be made to learn such details. The eventual formulation of a fire suppression plan will be the next step before limited suppression and priority full suppression are implemented.

Comments and Responses

23

THE STATE OF WYOMING

State Engineer's Office

BARRETT BUILDING May 18, 1984 CHEYENNE WYOMING 82002

ED HERSCHLER
GOVERNOR

MAY 18 1984

MEMORANDUM

TO: Paul Cleary, SPC's Office

FROM: Louis E. Allen, Water Resources Engineer *LEA*

SUBJECT: State Identifier No. 83-111, Platte River Resource Area Resource Management Plan, Draft EIS, February 1984, BLM.

I have examined the subject DEIS, and see no problems from this office for the Preferred Plan.

1 My only comment would be a reminder to the BLM to continue to obtain State Engineer permits for the proposed water developments prior to commencing construction.

Thank you for the opportunity to review this DEIS. Your referral memorandum is being returned as requested.

LEA/ilw
Encl:
cc: George L. Christopoulos
State Engineer

Response to Letter 23

1. The BLM will continue to obtain permits from the Wyoming State Engineer as standard operating procedure.

24A

THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

WYOMING RECREATION COMMISSION

1920 THOMAS ALVIN F. BASTRON, P.E. CHEYENNE WYOMING 82002

Director 777-7696

ED HERSCHLER
GOVERNOR

May 17, 1984

Mr. Dick Hartman
State Planning Coordinator
2320 Capitol Ave.
Cheyenne, WY 82002

Dear Mr. Hartman:

The BLM's Platte River Resource Area Resource Management Plan/Draft Environmental Impact (RMP/DEIS) Statement was received by this office March 26, 1984. Thank you for the opportunity to review this document.

1 The plan focuses on thirteen resource management issues that were generated through a public participation process and BLM personnel. Four alternatives were analyzed with Alternative 3: Moderate Level Management being selected as best to address the issues of recreation management. Ideally, the Wyoming Recreation Commission (WRC) would have preferred Alternative #4: High Level Management which would have provided more intensive management than Alternative 3. However, in this day of reduced manpower and budget, the more practical approach is Alternative #3.

2 The WRC would like to support the designation of the 200 acre Polson Spider Bentonite Pit as an open ORV area. The WRC, in completing the Master Plan for Edness Kimball Wilkins State Park in Natrona County, found that the general public consensus is that an ORV area is quite necessary. The BLM's proposal will address this need, this would be unique for Wyoming and may serve as a model of an adaptive re-use of a resource once abandoned.

3 The WRC is also in support of the resource management units (RMU's) and prescriptions as delineated. The WRC is especially pleased with RMU 8: Casper Mountain - Muddy Mountain, Jackson Canyon which includes the establishment of fifteen miles of snowmobile trails in the Muddy Mountain area. As you know the WRC operates the state snowmobile programs and

ALBERT PILCH G. LAWSON SCHWEN DAN MADIA MRS. ROBERT FRISBY FLOYD BARTLING JACK D. DEWOLF LARRY BAILEY MRS. ELIZABETH FIELD MARK ANDERSON
PRESIDENT VICE PRESIDENT SECRETARY TREASURER DIRECTOR VICE DIRECTOR VICE PRESIDENT VICE PRESIDENT VICE PRESIDENT
P.O. Box 47 P.O. Box 100 P.O. Box 100 P.O. Box 100 P.O. Box 100 P.O. Box 100 P.O. Box 100 P.O. Box 100 P.O. Box 100
Cheyenne 82002 Cheyenne 82002 Cheyenne 82002 Cheyenne 82002 Cheyenne 82002 Cheyenne 82002 Cheyenne 82002 Cheyenne 82002 Cheyenne 82002

Responses to Letter 24

1. You are correct in pointing out that personnel and budget constraints were significant in the selection of Alternative 3 instead of Alternative 4.
2. We appreciate your support. We will keep you informed of the progress made on this project.
3. The snowmobile program for Muddy Mountain is needed to meet the growing public demand for this winter activity. While a draft cooperative management agreement has been developed, the program has not been implemented because of concerns about critical elk winter range and enforcement. We believe those concerns can be alleviated, and we will keep you informed of any progress made for the use of Muddy Mountain for snowmobiles.
4. Thank you for your comment.

Comments and Responses

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Mr. Dick Hartman
May 17, 1984
Page 2

3 The BLM has been quite cooperative in the establishment of a program for the residents of this section of Wyoming.

4 The BLM is to be commended for a job well done in their consideration of recreation management in Platte River Resource Area RMP/DEIS.

Sincerely,

Alvin F. Bastron
Alvin F. Bastron, P.E.
Director

AFB/JB/1r

Responses to Letter 25

1. The document did not specifically address impacts from the programs you listed because when the document was written, our standard operating procedure required intensive cultural inventories and mitigation of the impacts on each important resource before any significant surface-disturbing activity could be authorized. This procedure is still in effect for all programs except energy and minerals management. Consequently, except for energy and minerals projects, effects on cultural resources from other programs are expected to be insignificant or non-existent. The impacts from energy and minerals programs in light of the recently issued Operating Order No. 1 are discussed in Response 3, below.
2. We agree with your suggestion.
3. Since the standard oil and gas lease form (page 317 in the draft) requires operators to cease construction if a cultural site is found until any significant data can be recovered, we do not believe that the implementation of Operating Order No. 1 will substantially increase the likelihood of damaging prehistoric or historic sites that are eligible for the National Register. Operating Order No. 1 does eliminate the need to conduct intensive inventories routinely, so that there is a greater likelihood that significant sites might remain unknown and thereby vulnerable to damage by a surface-disturbing activity. In the place of an intensive inventory, the order requires the BLM to establish, on the basis of existing data, that there is a "reason to believe" that sites may exist before an intensive survey can be required. The intent of this policy is to eliminate unnecessary surveys in areas where existing information suggests that there is a low probability

25A



WYOMING RECREATION COMMISSION
STATE HISTORIC PRESERVATION OFFICE
REVIEW AND COMPLIANCE

Interdisciplinary Staff Comments

Archeology • History • Historical Architecture • Recreation Planning

TO: Mark Junge, Chief
FROM: Richard Bryant, Compliance Archeologist
Dennis Madden, Compliance Historian
DATE: May 9, 1984
RE: §Platte River Area Resource Management Plan and Draft Environmental Impact Statement

After reviewing the subject document recently forwarded to this office, the following comments apply.

- 1) Under each of the four alternatives, the effects of various management program on resources are analyzed. The effects on cultural resources sometimes are, and sometimes are not, included. The effects of the Forest Management program are not analyzed under any alternative. Generally, the effects of the following programs on cultural resources are not identified:
energy and mineral management,
fire management,
grazing management,
recreation management,
soil, air and water management, and
wildlife management.

Although the effects of some programs are probably limited, certain programs, such as energy and mineral management or recreation management could have significant adverse effects. These effects should be identified and discussed.

- 2) The DEIS lists the exact legal location of several cultural resource sites by exact legal location in Appendix B. Public knowledge of the exact location of these sites may lead to unauthorized collection or vandalism. We recommend deleting the specific legal locations in the Final EIS.

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Mark Junge
Richard Bryant and Dennis Madden
May 9, 1984
Page 2

- 3) Overall, Alternative 4 appears to provide the best protection for cultural resource sites. The discussion states that specific known cultural sites will be protected from development and intensively managed. The location and protection of presently unknown sites will be undertaken as a response to development projects under current policy and regulations. One of the current regulations is Oil and Gas Operating Order Number 1. Although the wording of the Order is ambiguous, it seems to imply that cultural resource surveys would not be required for many, if not most, oil and gas projects. The effects of implementing Oil and Gas Order Number 1 should be addressed.
- 4) On page 301, Appendix A, it states that "...significance of cultural and natural history resources must be based upon National Register. . . criteria. . . ." The criteria do not address natural resources. Is this an error?
- 5) On page 303, it states that 680 acres of the Spanish Diggings site will be protected from surface disturbance. The site itself covers over 500 square miles of land. How and why were the indicated portions selected for protection as opposed to other portions of the site?
- 6) On page 304, creation of a data base using a predictive model to determine survey needs is discussed. Several large scale predictive modeling projects have been conducted in Wyoming in the past few years. None have proven much more accurate than random chance in accurately predicting site locations.

of finding sites. If a "reason to believe" that important sites may be affected can be established, then the BLM may require an intensive inventory before authorizing the project.

You are correct in your statement that many projects may not require an intensive survey. However, before any energy-related activity that requires surface disturbance is authorized, a Class I survey (existing data review) will be conducted. Consequently, all federally authorized energy and minerals projects will comply with legislation requiring a "survey".

4. You are correct; the criteria do not address natural resources. The sentence now reads "... significance of cultural resources must be based upon National Register . . . criteria . . .".
5. The portions of Spanish Diggings selected for protection (520 acres) are those defined as site 48PL48, determined by the Keeper of the National Register on April 9, 1981. The number 48PL48 was selected to designate the site within definite, manageable boundaries. The area has been reduced to 520 acres in the Platte River Resource Area. About 160 acres would be managed by the Newcastle Resource Area.
6. We appreciate your concerns. Most predictive models produced in Wyoming in recent years have proven inadequate for management needs; however, the model proposed in the RMP is not based upon the principles used by previous models. The introduction of the geographic informations system (GIS) into predictive modeling efforts, as we propose, should greatly increase the model's effectiveness. This system has been used by the BLM in Colorado and has proven much more accurate than the multi-variate techniques proposed in other models. In addition, the BLM will not implement any model until a sufficient level of intensive inventory has been completed that verifies the model's reliability.

Comments and Responses

26A

Noranda Exploration, Inc.
12540 W. Cedar Dr., P.O. Box 15638
Denver, Colorado 80215

noranda

Rocky Mountain District
Tel: (303) 988-6464
Telex: 45 4375
Noranda-DVR

June 7, 1984

Mr. Jim Melton
Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, Wyoming 82601

Dear Mr. Melton:

Below are my comments regarding the Platte River Resource Area Draft Management Plan. I hope they will be useful to you in formulating a final Resource Management Plan.

1 COMMENT #1: The only alternative presented for locatable minerals is the status quo. This point is not detrimental to our industry; however, it can be argued that a full range of alternatives were not examined. This deficiency would be remedied with a more in-depth examination of the mineral and energy industry needs within your management area.

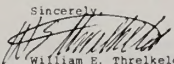
2 COMMENT #2: In Chapter 1, page 13, under the heading "Withdrawals", the paragraph is destructive to our industry. In my opinion, this statement assumes development of mineral resources is incompatible with public land use. It also assumes that the withdrawal of public land from mineral entry is the only means of protecting other resource values.

I would suggest that this section be rewritten to address the purpose for withdrawals, as opposed to the erroneous assumptions now used. An example of this might be:

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Mr. Jim Melton
June 7, 1984
Page 2 of 2

2 "Specific areas within the management region contain resource values which cannot be duplicated elsewhere in the region. These would include developed recreation areas, important watershed areas, and historic resources. The areas which contain special resource values will be recommended for withdrawal so that the unique character does not conflict with other public land use."

Sincerely,

William E. Threlkeld
Geologist

WET/jla

Responses to Letter 26

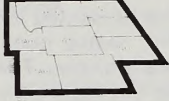
1. We do not agree that the only alternative presented for locatable minerals in the RMP was the "status quo," Alternative 1. The 1872 Mining Law is the status quo. The operation of the 1872 Mining Law can be revoked on the public land only by another law or by withdrawal. A full range of withdrawal alternatives was analyzed in the lands program.
2. The issue statement does not assume that a withdrawal is the only means to protect resource values. It does state that certain areas or resource values cannot adequately be protected without a withdrawal. Such areas or values cannot withstand even a low level of mining activity without significant and possibly irreversible losses. Other methods of protection are ACEC designations and application of the regulations in 43 CFR 3809. Since these regulations are standard operating procedure, no detailed discussion is presented. We realize that many impacts can be mitigated during the mining operation and that disturbed areas can be restored after a mining operation is completed. We also recognize that certain resource values and land uses are unique, and once disturbed, cannot be replaced or re-created elsewhere.

The nature of a mining operation is such that significant surface damage may result. This has occurred at several existing mines in the PRRA. Such impacts need not be irreversible. Mitigation applied during mining and rehabilitation undertaken afterwards can restore many areas to an equal or better condition than before mining. Loss of some resource values is acceptable in view of the benefits from mining. However, loss of rare or unique resource values is not acceptable and protection is warranted.

The purpose of a withdrawal is to preclude one or more land uses on a particular land parcel in order to ensure protection of a special resource value or land use. With few exceptions, new withdrawals and those that have been reviewed in accordance with FLPMA only segregate against mining. All other public land uses are discretionary.

Comments and Responses

27A



**Rocky Mountain
Oil & Gas Association, Inc.**

345 PETROLEUM BUILDING • DENVER, COLORADO 80202
303/534-8261

June 11, 1984

Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

I am writing to you on behalf of the Rocky Mountain Oil & Gas Association (RMOGA) regarding the Resource Management Plan (RMP) for the Platte River Resource Area (PRRA). RMOGA is a trade association whose hundreds of members account for more than 90% of the exploration and production in the eight-state region it serves.

1 The plan states, and our experience has been, that restrictions to oil and gas operations are treated on a case-by-case basis with discretionary latitude at the local level. Restrictions can generally be waived if potential impacts can be acceptably mitigated. Our concerns with the Platte River RMP constraints are largely that the levels of protection, although they may not be generally invoked, are unrealistic.

2 For example, we find Constraint SWA2, prohibiting development within 200 feet of intermittent and ephemeral streams, as having the potential to virtually foreclose activity in the entire RA, dependent on rainfall. Constraint WL7, protects hawk nesting sites, when there is no shortage of hawks in Wyoming. An especially conspicuous excess is Conclusion #11, South Big Horn EA (p. 345) disallowing surface occupancy within 1-1/2 miles of any raptor nesting. Constraint WL9 disallows development of potential black-footed ferret habitat when it is our understanding that the only ferret sightings have been in already-developed areas. The no-development zone within 1/4 mile of the Platte River which contains highways, railroads, cities and towns, and other abundant current development, is another example of unreasonable constraints. Again, we note your statement (p. 62): "Blanket application of the stipulations does not occur." That indeed has been our experience. However, if the RMP provides the legal opportunity to apply blanket restrictions, some areas will apply them, and reasonable management could be compromised, both on federal and split-estate acreage.

Responses to Letter 27

1. See Response 1 to Letter 11.
2. See Response 2 to Letter 11.
3. See Response 3 to Letter 11.
4. See Response 4 to Letter 11.
5. See Response 5 to Letter 11.
6. See Response 6 to Letter 11.
7. See Response 7 to Letter 11.

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June 11, 1984
Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management

page two

3 There is, we believe, an error of fact on p. 62, in Leasing, stating that "The BLM would lease in these areas only on approval from the surface managing agencies." This statement is true for acquired lands; however, public domain Forest, for example, does not require consent. The Forest Service only recommends, and the BLM is not bound to honor that recommendation.

4 Although you explain that oil and gas development and the constraints on the petroleum industry were not an issue in the RMP, nonetheless oil and gas are thoughtfully considered throughout the text. You cite (p. 1) that only 37,000 acres of the PRRA are withdrawn. However, the impact of several of your other issues could substantially erode the ability to develop oil and gas. For example, cultural resource protection could swing between 2577 and 4725 acres, withdrawals could vary from 10,500 acres to 38,800 acres, recreation management from 12,733 acres to 47,480 acres, between alternatives, with oil and gas development restricted or denied accordingly. Because (1) withdrawals, (2) no surface occupancy, and (3) restricted occupancy each add incrementally to the adverse effect on oil and gas development possibilities, RMOGA has suggested to the PRRA RMP team that a matrix analysis of the oil and gas potential of an area, and of the effect of these changing access restrictions on the accessibility of the area for exploration would provide useful comparative indices. You have the raw data (geologic potential in Map 5 and affected acreages in different alternatives) to perform such a matrix analysis, and we urge you again to consider this process.

5 In your summary comparison, you state that 4,644,090 acres are available, subject to constraints and mitigation. However, the constraints and mitigation vary between alternatives, and the proposed RMOGA matrix analysis would illustrate the effect of that variation. In fact, with some constraints and/or mitigation requirements, some of these "available" acres could become entirely unavailable.

6 As Map 5 adequately illustrates, the PRRA has a high level of petroleum occurrence; we are concerned that restrictions on oil and gas development do not unwarrantedly inhibit development of this excellent petroleum potential. We do appreciate that the bulk of the PRRA is available for standard leasing and development, and we hope to see a final management plan which will provide continued opportunity, especially in the areas of high geologic potential. Absent a demonstration through a comparative analysis (such as the matrix system) that these high potential areas are indeed open, we are not in a position to expose a preference for one alternative over another.

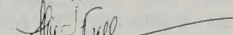
27C

June 11, 1984
Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management

page three

In general, we believe this RMP/EIS is a high quality document, and we hope that other Wyoming RMP's will meet the standards this pilot document has set.

Sincerely,


ALICE I. FRELL
Public Lands Director

AIF:cw

28A

TRUE OIL COMPANY

RIVER CROSS ROAD

CASPER, WYOMING
P.O. DRAWER 2380
PHONE 237-9301
82602

June 11, 1984

Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

This letter is being written for True Oil Company and the Independent Petroleum Association of America (IPAA) of which I am Public Lands Committee Chairman. IPAA is an organization of 12,000 members and associate members in the United States who are small businessmen engaged in exploration for, and development and production of oil and gas.

Following are my comments on the draft EIS for the Platte River Resource Area RMP:

- 1 The comments I made last fall were obviously not even read or considered because you have the same errors and omissions in the RMP as you had in your last year's proposal.
- 2 It is patently obvious that you have not considered the oil and gas industry in the RMP because you are recommending that access be denied in practically all of the tracts in the Platte River Resource Area. Once again, you are putting access stipulations everywhere and as I mentioned in my comment letter to you last fall, you did not follow the law of either FLPMA or NEPA which says that public land management will be based on multiple use and sustained yield unless otherwise specified by law. You are opening the distinct possibilities of lawsuits to force the compliance of these laws so the public lands can be used for the nation's needs of oil and gas, timber, minerals, strategic metals, etc.
- 3 On page 161, you state that oil and gas activity will destroy habitat amounting to 12,750 acres over a ten year period. Three pages later, on page 164, you state that all but 5% of the acreage disturbed by oil and gas activity can be rehabilitated. Which is correct? It seems to me that you have not taken the time to visit locations which have been abandoned by the oil and gas industry and reclaimed according to law -- in most cases these reclaimed tracts are in better shape after oil and gas activity than they were before. Additionally, your contradictory statements make it painfully clear that you really have not studied these lands or the impact that industry operations have on them.

Responses to Letter 28

1. As you may recall, you sent this office a letter dated February 9, 1984, to which you attached a copy of a letter to the Platte River Resource Area Manager dated September 22, 1983. This office responded to both letters in our letter of February 24. Copies of the three letters are available in the PRRA office.
2. Less than 1% of the public land administered by the BLM in the PRRA is unavailable to the oil and gas industries. Some of these lands are subject to various constraints such as seasonal access requirements. In general, all proposals in these areas are evaluated case by case, and restrictions can be waived if impacts can be properly mitigated. We believe we have complied with the legal requirements of the Federal Land Policy and Management Act (FLPMA) and the National Environmental Protection Act (NEPA). The BLM has no other recourse.
3. The statements on pages 161 and 164 of the draft are based on the average number of wells drilled annually and the average amount of disturbance at each well site. Over ten years, a total of 12,750 acres of wildlife habitat will be destroyed for as long as the wells operate; of that total, 5% will not be reclaimed. The species that inhabited each site will not occupy it during the life of the well.

The PRRA staff spends many hours each year conducting on-site inspections and witnessing abandonment of well sites. In most cases, reclamation is very good. About 5% of the time, it is not. We cannot agree that most reclaimed tracts are "in better shape" after oil and gas activity. Thousands of years of naturally occurring forces have, perhaps, determined the "best shape." Various land uses may alter that shape, but that does not necessarily mean the new condition is better.

Comments and Responses

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Page 2
Letter to Mr. Jim Melton

4. On page 304, you have removed three separate tracts from oil and gas leasing because of resource considerations. These tracts are in the proximity of existing KGS tracts and a couple of them are a mile or less from a KGS boundary. I am sure you will agree that oil and gas is a "public resource" and the lack of oil and/or gas would have a terrible impact on the security of our great country. Why do you not give oil and gas equal consideration with other natural resources? These areas should be open to oil and gas leasing -- once again your obvious bias and prejudice is showing by giving greater consideration to other resources than you do to oil and gas.
5. You have a tremendous amount of overlapping with the different restrictions and stipulations which you have in your RMP and we have asked you many times, in meetings with you and also in our previous letters (also letters from the Petroleum Association of Wyoming), exactly where the boundary lines of each of these restricted or stipulated areas are on the map so we can tell the exact amount of damage you are doing to the exploration efforts of the oil and gas industry and the other natural resources areas such as mining, timbering, grazing, etc. For some reason, you have been unwilling to supply this information.
6. You have placed restrictions and stipulations in the foothills area of the Laramie Range where it is my understanding there is some interest by the oil and gas industry, where it is thought there might be some geologic thrusting similar to the Western Wyoming area of the Overthrust Belt. These areas should be left open for oil and gas exploration.
7. You have placed "no surface occupancy" or "no surface disturbance" stipulations for the oil and gas industry in 27 places out of 29 total oil and gas restrictions in this RMP. Many of these restrictions use a 15 degree slope or greater as the reason for closing the areas to oil and gas exploration. If you would read your Wyoming BLM Manual supplement 5109, Surface Management Requirements for Oil and Gas Operations, you would find that slopes from 33% up to 50% is the area where you can expect fair revegetation or rehabilitation of the tracts and not 15% as you are presently using. A 15% slope restriction certainly precludes most of the areas in the southern Big Horns and also the foothills of the Laramie Range. The south portion of the Big Horns exposure is mainly Flathead sandstone and Madison limestone on the surface and these two formations are very hard and do not weather or erode rapidly, or even moderately rapid. Most of the eastern exposure -- foothills -- of the Laramie Range would also fall in this category of not weathering or eroding rapidly. Therefore, your lack of knowledge and/or bias is obvious.

4. The leasing of these parcels has been reevaluated, and it has been determined that the decision should remain. The parcels in T. 31 N., R. 83 W., are on very steep slopes (15% to more than 50% grade), soils are highly erosive, and existing vegetation is sparse. The only feasible access to this area is by means of a road that meanders up a slope in a floodplain. This area is within the Alcova Rim Fragile Area discussed on page 312 of the draft under "SWA-9." The parcels in T. 39 N., R. 80 W., are in the Castle Creek sensitive drainage identified under SWA-1 on page 309 of the draft. Slopes here also are steep (20% to more than 50%), and soils are highly erosive with sparse vegetation. The parcels in T. 40 N., R. 77 W. are located along a timbered drainage with slopes of more than 25%. Removal of the trees would result in much erosion with silt filling in down-drainage reservoirs.
5. Attempts have been made in the past to provide information. It is also available in the Oil and Gas EA and in the draft Platte RMP/EIS. Most, if not all, of those areas are defined on the maps in the draft document. The boundaries are as accurate as field surveys allow, but the information is subject to change and refinement because we cannot define, for example, where the next eagle nest or roost will be located.
6. The Laramie range foothills are open for oil and gas leasing. Any acreage that has been applied for has been leased.
7. The statement about slope percentage (p. 345, column 1, item 1 in the draft) has been changed in the final document. The passage will read as follows:

No occupancy or other surface disturbance will be allowed on slopes in excess of 25% without written permission from the District Manager, Bureau of Land Management. When disturbance is proposed and approved on slopes in excess of 25%, engineered drawings for construction, drainage design, and final contours proposed after rehabilitation will be required. No occupancy will be allowed on slopes of more than 25% in the South Big Horns.

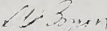
It is extremely difficult to operate heavy equipment on slopes of more than 25% and to perform adequate reclamation on sites with this amount of slope. This is correctly stated under "SWA-4," on page 309 of the draft. This office is aware of the surface geology in both the south Big Horn Mountains and the Laramie Mountains. Both areas are under lease; however, applicable surface protection stipulations have been added to the leases.

28C

Page 3
Letter to Mr. Jim Melton

The legal requirements of FLPMA and NEPA are very clear and you have certainly not abided by them. You are flirting with lawsuits if you do not correct all of these errors you have made in this RMP.

Sincerely,


Robert O. Byron

ROB/ec

cc Mr. Robert Burford, Director, Bureau of Land Management
Mr. Hillary Oden, Wyoming State Director, Bureau of Land Management
Mr. Tim Monroe, Casper District Manager, Bureau of Land Management

Comments and Responses

29A



United States Department of the Interior
NATIONAL PARK SERVICE

ROCKY MOUNTAIN REGIONAL OFFICE
655 Parfet Street
P.O. Box 2528
Denver, Colorado 80225

IN REPLY REFER TO:
L7619 (RMR-PC)

JUN 11 1984

Memorandum

To: Mr. Jim Melton, Area Manager, Platte River Resource Area,
Bureau of Land Management, Casper, Wyoming

From: Associate Regional Director, Planning and Resource Preservation,
Rocky Mountain Region

Subject: Review of Draft Resource Management Plan/Environmental Impact
Statement (RMP/EIS) for the Platte River Resource Area, Wyoming
(DES 84/13)

The National Park Service (NPS) has reviewed the subject document and has the following comments.

- 1 The text first mentions trails on page 35, referring to the "Oregon Trail" and the "Oregon-Mormon Trail." The full official names of the trails should be given here, i.e., the Oregon National Historic Trail and the Mormon Pioneer National Historic Trail. Then the document should point out if these titles are to be abbreviated through the rest of the RMP/EIS.
- 2 Further, the RMP/EIS should point out that overall administration of the national historic trails has been delegated to the NPS by the Secretary, with detailed management by the specific management agencies such as the Bureau of Land Management (BLM).
- 3 On page 46 and elsewhere in the RMP/EIS, the "Oregon-Mormon Pioneer National Historic Trail Recreation Area Management Plan" is mentioned. This is the specific trail plan being prepared by the BLM. But only on table 3-19 could we find reference to the two documents on which this plan is based, e.g., the comprehensive plans for both national historic trails that were prepared by the NPS as part of its overall administrative function. These two documents should be included in the references, page 365.
- 4 We also believe the document could be clarified by including a definition of a national historic trail in the glossary, page 362. Additionally, Map C, page 231 is erroneous and confusing because it shows the "Oregon-Mormon Trail" as being on both sides of the North Platte River. The Comprehensive Plan for the Mormon Pioneer National Historic Trail, as approved by the Secretary, shows that trail as entering Wyoming from the east on the north side of the river, but crossing the river at Fort Laramie National Historic Site and continuing on the south side of the river, coinciding with the Oregon National Historic Trail. The approved comprehensive plan for the Oregon National Historic Trail shows the primary route of that trail as always on the south side of the river from the Nebraska line to Casper, where

Responses to Letter 29

1. We agree with your suggestion. The paragraph in the draft that you mentioned has not been reprinted in the final document; however, we have given the full names of the Oregon National Historic Trail and the Mormon Pioneer National Historic Trail in the paragraph on "Recreation Management" under "Rationale for Selections" in chapter 2 of this document, with a parenthetical reference to the shortened title used thereafter.
2. The National Parks and Recreation Act of 1978 amended the National Trails System Act to establish the Mormon Pioneer National Historic Trail. The act places responsibility for administering the trail with the Secretary of the Interior. The National Park Service has the lead role in developing guidelines for the proper management of the trail by the various Interior agencies. The BLM is responsible for managing federal portions of the trail on BLM lands. These responsibilities for management, maintenance, and enforcement are defined in Section IV of the "Interagency Agreement Between National Park Service (NPS) and the Bureau of Land Management (BLM) Concerning the Mormon Pioneer National Historic Trail." This agreement was signed by the BLM State Director, Wyoming, on March 25, 1983, and by the NPS Regional Director, Rocky Mountain Region, on April 25, 1983.
3. These two documents have been included in the "Additional References" in the final document.
4. The definition is as follows:

National Historic Trail: A historic route that has been designated by the Congress of the United States as having national importance. Under the National Trails System Act, as amended in 1978, the Secretary will initiate a program to develop the recreational potential of such a trail for the benefit of the public.

The map on page 231 is correct. Confusion can arise because NPS's Comprehensive Plans deal only with the major (primary) routes of the trails. The BLM, in accordance with the criteria established by the National Register of Historic Places, must consider not simply the major routes but any trail remains discovered from minor routes or alternate routes. In addition, the NPS plan for the Oregon Trail considers historic usage only up to 1849. Andrew Child pioneered an alternate route in 1850 on the north side of the North Platte River. The BLM must consider historic usage up to 1934, per National Register criteria. The management unit is correct.

5. Research of our records shows that the NPS has informed the BLM of the status of only one of these sites—Hell's Half Acre. This site is primarily under private ownership. Consequently, excessive human visitation through the private commercial operation at the site is the primary danger to the integrity of the site.

Your comment letter provided the first information we had on the status of Bad Water Grey Hills, the Precambrian Gneiss of the Big Horn Mountains, and the Rainbow Hills of Araminto. We contacted Ms. Madison of the NPS, Denver, who sent us fact sheets for each of these potential national natural landmarks. The final RMP/EIS documents the specific locations of these landmarks. Any BLM actions that may be carried out within their boundaries will be evaluated case by case so that site integrity will not be jeopardized. We look forward to working with the NPS in the designation process until a final determination is made.

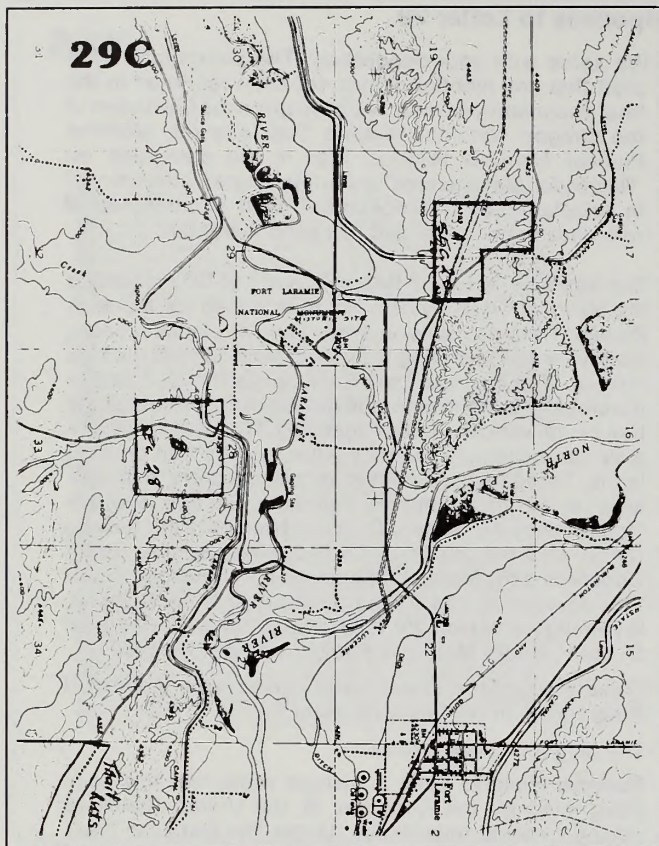
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- 4 the coinciding trails cross the river again. We are interested in cooperating with BLM to protect and interpret trail ruins and other trail resources. Fort Laramie National Historic Site might be one focal point for such interpretation.
- 5 The Platte River Resource Area contains four potential National Natural Landmarks, all located in Natrona County. They are: (1) Bad Water Grey Hills, (2) Hell's Half Acre, (3) Precambrian Gneiss of the Big Horn Mountains, and (4) Rainbow Hills of Araminto. National Natural Landmarks are so designated because of nationally significant ecological or geological features. We recommend that the subject document include these potential landmarks in the "Special Designations" section under the analysis of the affected environment (p. 129), and consider any impacts to these areas in Chapter 4. Further information on these potential landmarks can be obtained from Ms. Carole Madison, Division of Recreation Grants and Review, at the above address, phone FTS 234-6443.
- 6 The Platte River Resource Area also contains two National Historic Landmarks, both in Platte County. They are the Swan Land and Cattle Company Headquarters and the Oregon Trail Ruins. National Historic Landmarks are designated as illustrative of one or more facets of the historical development of the United States, and should be maintained in order to preserve their historic integrity. Further information on these historic landmarks can be obtained from Ms. Katherine Cole, Division of Cultural Resources, at the above address, phone FTS 234-2764.
- 7 We note that two parcels of public land near Fort Laramie National Historic Site have been designated for disposal. These parcels are located in Sections 20 and 28, T26N, R64W. Although outside the national historic site boundaries, we have identified these lands as being within sight of the fort and contributing to the historic scene. We would prefer that these lands be retained under BLM management and protected from any surface development. A map is enclosed depicting this situation.
- 8 Incidentally, "Fort Laramie National Monument" on Maps C, G, and N should read "Fort Laramie National Historic Site."
- 9 Finally, we believe that many of these matters could have been resolved earlier if the NPS had been included among the consulting Federal agencies as listed on page 285.

Richard A. Strait

Enclosure



6. Neither of the national historic landmarks in Platte County is under the jurisdiction of BLM. The Swan Land and Cattle Company is on private surface, and the Oregon Trail Ruts are on state land. However, the Swan Land and Cattle Company site overlies federal minerals, but this situation is already addressed by the fact that the landmark is listed on the National Register. Our management of this site is predetermined by the legal description that encompasses National Register property. We cannot allow adverse impacts to this site without undergoing proceedings according to section 106 of the National Historic Preservation Act of 1966.

7. The criteria developed for land disposals preclude disposal of public lands that are designated as national environmental assets, national conservation areas, national historic trails, natural areas, areas of cultural or natural history, areas of critical environmental concern, or congressionally designated areas. Additionally, lands would not be disposed of if they are in large manageable blocks, contain significant wildlife, recreation, or other resource values, or are in the public interest to retain.

The lands you refer to do not specifically fall into one of these categories on the basis of our existing information or the information provided. However, if the NPS could provide more specific details on the relationship of these parcels to the Emigrant/Oregon trails and the NHS, and the possible ramifications of disposal, we will place them in the retention category. Otherwise, we will consider these parcels in detail case by case, ensuring that NPS input and coordination is obtained and made a part of the final decision regarding disposal or retention. During preparation of the Draft Plan, NPS Officials at Fort Laramie indicated they had no interest in obtaining these parcels.

8. We have changed the description to Fort Laramie National Historic Site.

9. We apologize for the omission of NPS in the list on page 285 of the draft. The NPS was included in our mailings and coordination efforts, and the superintendent of the Fort Laramie National Historic Site attended the public meeting held in Torrington on May 17, 1983. The draft Platte RMP/EIS was hand delivered to the Fort Laramie office on April 24, 1984, the day of the public meeting in Torrington.

Comments and Responses

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Department of Energy
Western Area Power Administration
Loveland-Fort Collins Area Office
P.O. Box 3700
Loveland, Colorado 80539

JUN 11 1984

Mr. Jim Melton
Area Manager
Platte River Resource Area
951 Rancho Road
Casper, WY 82601

Dear Mr. Melton:

This is in response to your request to review the draft Resource Management Plan/Environmental Impact Statement (RMP/EIS) for the Platte River Resource Area.

- 1 As a power marketing agency, Western Area Power Administration (Western) is attentive to any resource management plan that may involve plans for construction, operation, and maintenance of our electric transmission system. As you have been involved and aware of Western's plan to rebuild our system from Thermopolis-Alcova-Casper and the ensuing environmental studies, we have a direct interest in designation of electric corridors. Therefore, please reference the enclosed map for Western's preferred alignment (red line) in the Alcova-Casper area. The red line passes through the Platte River Resource Area.

We strongly feel that utility corridor designation in the final EIS should include the red line area shown on the map. We have no other comments on the RMP/EIS.

Thank you for the opportunity to comment.

Sincerely,

Peter G. Ungerman
Peter G. Ungerman
Area Manager

Enclosure

[NOTE: The map that was enclosed with this letter is too large to reproduce in this document. It is on file at the FPPA office in Casper.]

Response to Letter 30

1. A new corridor will be designated approximately 1 mile north of the Oregon Trail Road. This line is intended to replace two existing corridors, one along the North Platte River and the other along the Oregon Trail Road. This is the route to be used by the Western Area Power Administration in constructing the Thermopolis-Alcova-Casper power line project. This corridor would parallel and cross over a small segment of the Oregon Trail Road near Oil Mountain, and it would cross the Emigrant Gap Ridge. The segment you have suggested will be utilized only by power lines between Casper and Oil Mountain. Neither the Emigrant Ridge area nor Oil Mountain is suitable for pipeline construction because of the steep slopes (10 to more than 50%), the erosive and sometimes shallow soils, and the potential impacts on scenic quality and watershed values. Therefore, a branch corridor will be designated around the north end of Oil Mountain, connecting to the Poison Spider Road corridor for use by pipelines. Power lines can continue to use the new corridor over Emigrant Ridge subject to provisions protecting the soil and watershed values in that area.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
2120 Capitol Avenue, Room 7010
Cheyenne, Wyoming 82001

IN REPLY REFER TO:

June 11, 1984

Memorandum

To: Area Manager, Platte River Resource Area, 951 Rancho Road, Casper, Wyoming 82601
From: Project Leader, Ecological Services
Subject: Review of Platte River Resource Area Resource Management Plan/Draft Environmental Impact Statement

We have reviewed the subject document, and offer the following comments.

We found that the DEIS adequately identified issues and offered management options under at least one of the proposed alternatives. However, the mix of program objectives under each alternative makes it impossible for us to support any one of the alternatives as stated. Furthermore, the preferred management plan is a mix of the proposed alternatives. In some cases, we do not agree with the selected preferred alternatives. We recommend, as does the Wyoming Game and Fish Department (WGFD), that the following alternatives be selected as they would be the most beneficial to wildlife:

Category	Alternative
1 Fire	3
2 Forest	3
3 Grazing	1
4 Lands	1 (with added emphasis on access to public lands)
5 Recreation	3
6 Wildlife	4

Our comments will relate to specific DEIS issues and recommendations dealing with those issues, regardless of the alternative in which they appear.

Responses to Letter 31

1. See Response 67 to Letter 19.
2. See Response 68 to Letter 19.
3. See Response 69 to Letter 19.
4. See Response 70 to Letter 19.
5. See Response 71 to Letter 19.
6. See Response 72 to Letter 19.
7. We agree. There are captions for the photographs in the final document.
8. Wetland and riparian areas along the North Platte River would be disposed of only under the Recreation and Public Purposes Act. This would ensure that these lands would be developed for public use and continue to be used for that purpose. The act requires that detailed management and development plans be prepared before issuance of a lease or patent. Plans for these parcels must include specific measures to protect, enhance, and maintain the wetland/riparian values along the river.

Most of the public land identified for disposal is rangeland best suited to grazing. It is anticipated that most of this would continue to be used as at present with little or no alteration. Some parcels do have potential for irrigated or dryland crop production; the use of these could be altered. Also see Response 4 to Letter 8 and Response 2 to Letter 19.

In many cases, exchanges for those disposal parcels would be neither practical nor in the public interest. In accordance with Section 206 of FLPMA, an exchange must improve federal land management opportunities in

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- 7 The text's photographs enhance the DEIS, but we recommend that legends be provided to assist the reader in visualizing the resources of the area.
- 8 We are concerned about your agency's plan to dispose of up to 102,700 acres of public lands within the planning area, especially wetland and riparian areas along the North Platte River. Scattered parcels of public land can provide sanctuaries for wildlife in areas where private lands have been altered. Disposal of public lands may also reduce the opportunity for outdoor recreation such as hunting and fishing. Scattered land parcels may appear difficult to manage; however, a policy of allowing many of these parcels to remain natural or revert to natural conditions may require minimal BLM management. In cases where it is in the best interest of the public and resources associated with the land to dispose of a tract, we recommend an equitable land exchange rather than outright land sale. Please keep this office informed of plans to dispose of or exchange any of the lands in question.
- 9 Land sales and exchanges could influence FWS programs. Currently, land exchanges are one of the best methods for FWS to acquire needed lands. We are particularly interested in riparian and wetland areas that now support or could be managed to support waterfowl and migratory birds. In cases where the property does not fit our program needs, BLM has the responsibility to ensure protection of wetlands and riparian areas when they are transferred to the private sector, as required by Section 203 of FLPMA, Executive Order 11990 and Bureau policy as set forth in BLM Manual 6740.06(e)(1). The WGFD may be interested in lands suitable for wildlife conservation. Public Law 80-537 (16 U.S.C. 667b) authorizes transfer of excess lands without reimbursement to the Secretary for the Migratory Bird Program or to the state for conservation of resident wildlife.
- 10 Another area of concern is proposed brush and noxious weed control on wildlife winter range in the vicinity of streams and sage grouse strutting grounds. We recommend a two mile buffer zone around sage grouse strutting grounds to protect nesting and brooding areas. In addition, no brush control work should be conducted on wildlife wintering areas without concurrence of WGFD. Woody riparian vegetation should be protected for its high value for fish and wildlife. In riparian areas, we recommend against the use of persistent water soluble herbicides such as Tordon, and that noxious weeds be treated with selective tools, such as the wick applicator. We are also concerned about using Tordon adjacent to stream areas containing reproducing populations of trout. Research conducted by Dan Woodward of the FWS Field Research Laboratory, Jackson, Wyoming indicates that Tordon is very toxic to young of the year trout.

order to be considered. Exchanges on many of the disposal parcels would only serve to "block up" small parcels by exchanging one isolated parcel for another. The cost of processing such exchanges would far exceed the public benefits that would be realized.

The PRRA has a policy of notifying the FWS of any land disposal action at least at the time a Notice of Realty Action or similar notice is published. In most cases, FWS will be notified at the earliest possible stage in the disposal process. Whenever public lands containing wetlands of significant value are disposed of, appropriate restrictions will be included in the patent to insure protection of these resource values.

9. The USFWS and WGFD may wish to identify the lands that are desired for conveyance under Public Law 80-537. Such a list could be most useful in implementing the land disposal portion of the RMP.
10. It is BLM policy to coordinate closely with wildlife agencies on all projects including brush and weed control, fencing, and water development. The problems mentioned here would be addressed during planning for specific projects. Project proposals, if approved after review, would contain stipulations to protect wildlife habitat within the project area.

Brush control projects are coordinated with WGFD on an individual project basis to minimize disturbance to winter ranges. Burns in sage grouse habitat, also coordinated with WGFD, have improved habitats in the Bates Creek Reservoir area. The 2-mile buffer zone would be excluded from burning unless consultation with WGFD should result in a recommendation to include patches of brush in the buffer area. Brush control would not be conducted in riparian areas. Weed control has been done in wetlands at the wildlife management units under WGFD supervision.

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- 11 Fencing has long been a problem associated with the management of antelope and their habitat. There are no universal fencing guidelines which can be applied in every situation. We recommend that BLM coordinate fencing plans closely with WGFD to prevent impacts to antelope and other wildlife species. In addition, we recommend that Antelope Habitat Management Plan (W-2, page 313) be implemented to correct past fencing problems on antelope range in Natrona County.
- 12 Permanent water sources on water-deficient winter big game ranges could be detrimental to wildlife and should not be developed without the concurrence of WGFD.
- 13 The proposal to allow sand and gravel operations within the existing one-quarter mile protective buffer zone along the North Platte River concerns us. This riparian zone is valuable to wildlife and the endangered bald eagle. Therefore, we do not recommend sand and gravel extraction within one-quarter mile of the North Platte River. This restriction should not be a problem since the DEIS indicated that gravel sources outside the one-quarter mile buffer zone are adequate to meet future demands. The DEIS (page 198) ignores the vast array of wildlife species that could be affected through the development of sand and gravel sites.
- 14 The DEIS identifies the significance of the erosion and water quality problems in the Bates Hole area and the following sensitive drainages: Alcova Rim, Cloud Creek, Cave Gulch, Castle Creek, Aspirin Creek, Wallace Creek, and Small Creek. We believe these problems must be solved, especially those caused by livestock overgrazing, roads, oil exploration, and timber production. Many of the proposed timber sales are located in areas that have been identified as "fragile and sensitive watersheds." Therefore, we recommend that your agency not consider timber sales in highly erosive areas.
- 15 It is difficult to believe that the resource management area does not contain any rangeland in poor condition (page 28). If this is the case, it is a mystery why so many watersheds are being proposed for watershed management improvements (page 279). We are familiar with Bates Hole, and we would classify many public land areas within the basin as being in poor condition. If this area was included in the 1980 range condition survey, what was the range condition? We recommend that BLM conduct a more comprehensive range survey, especially in fragile watersheds.
- 16 The resource environmental consequences section (pages 156-164) for minerals discusses potential mineral development impacts. Most of these impacts could be minimized or eliminated if Best Management Practices are implemented. Therefore, we recommend application of Best Management Practices and avoiding sensitive areas such as wetlands and floodplains.

11. As mentioned in Response 10, above, each range improvement project (including fences) is coordinated with WGFD. The decision to correct fences that do not meet BLM specifications is a part of our preferred management plan.
12. This detrimental impact would be weighed in the site-specific environmental analyses and cost-benefit analyses for projects. WGFD would be consulted during these analyses.
13. The alternative that would allow mining sand and gravel along the North Platte River was not selected in the preferred management plan. Impacts were not repeated in the "Environmental Consequences" section for Alternative 3 because they would be essentially the same as for Alternative 2 (see page 189). As indicated on page 50 of the draft, discussions of impacts were not repeated if they were essentially the same as those previously discussed. Also see Response 5 to Letter 19.
14. Timber sales are not planned for the fragile and sensitive areas you have identified. The preparation of a timber management plan for a specific timber sale area would cover features of the sale. These features include erosion hazards evaluated in the environmental analysis.
15. Bates Hole was included in the range condition surveys done in the 1980s. The results of these surveys are discussed on pages 79 and 80 of the draft. It is incorrect to conclude that if a watershed is in poor condition, the range condition must likewise be poor. A prime example is the Bolton Creek area in the Bates Hole. Range condition there is fair to good, but the area has poor physical characteristics such as soils, steep slopes, and rocky areas with sparse vegetation.

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17. Wildlife management objectives under the Preferred Management (page 247) are very limited. The plan indicates that raptor nesting areas would be monitored but does not provide for their protection. A raptor nest protection plan should be included as part of the selected management plan. We also recommend that BLM actively manage their lands to increase wildlife habitat quality, particularly riparian habitats.
18. The BLM recognizes the importance of riparian-wetland habitat, and through general policy has encouraged the protection and enhancement of these areas. On February 5, 1980, the BLM published Final Guidelines: Wetlands-Riparian Area Protection and Management: Policy and Protection Procedures in the Federal Register (Volume 45, No. 25, pages 7889-7895). The publication states that, "Riparian areas which presently or potentially support broad-leaf vegetation in arid and semi-arid ecosystems are of special management concern." One of the guidelines stated objectives is to "implement a management system to protect, maintain, and enhance all wetland-riparian areas administered by BLM." The guidelines further state that BLM policy will be to "Avoid the long and short-term adverse impacts associated with the distribution, loss, or degradation of wetland-riparian areas..." and "Preserve and enhance the natural and beneficial values of wetland-riparian areas which may include constraining or excluding those uses that cause significant, long-term ecological damage." We do not believe that the DEIS adequately observed these guidelines. We recommend that during the final EIS preparation, and selection of an alternative, more attention be given to wetland-riparian habitat needs. Needed protection should not be delayed until after long-term monitoring is completed. This office is willing to assist BLM's staff in the development of site-specific plans to protect riparian-wetland areas.
19. The Preferred Management Plan's proposed timber harvest (page 273) could affect wildlife and aquatic resources and should be evaluated on a site-specific basis. The described benefits in many instances would not offset the resulting impacts, especially in riparian areas, near streams, and fawning and calving areas. Timber harvest should not be considered in these cases.
20. Prairie dog poisoning programs should not be initiated in the resource management area without surveys to determine if black-footed ferrets are present. If ferrets or their sign are identified, contact the FWS Endangered Species Team in Helena, Montana before proceeding with any actions that may affect ferrets.
21. Prairie dog burrows provide nest sites for burrowing owls. In addition, prairie dogs are an important prey base for raptors and carnivores. Therefore, we recommend that no eradication program be conducted in any prairie dog towns on BLM lands containing burrowing owl nests or where no documented prairie dog problem occurs on adjacent private land. If prairie dog problems occur on adjacent private lands, BLM should not

16. Appendix B defines planning decisions applicable to all actions. We believe these decisions do much toward providing the best management practices you have suggested. In particular, note SWA2, page 309 of the draft, which restricts actions from wetlands and floodplains.
17. We believe that nests of federal and state high interest raptor species are afforded adequate protection by WL-7 (page 314 in the draft). We believe we also have provided for the protection of wetland-riparian areas. While the plan focuses on the major wetland riparian areas, this does not mean we have ignored other such areas. Riparian areas affected by livestock grazing would be fenced under the preferred plan. Other riparian areas associated with HMP areas would be managed primarily for wildlife under the HMP.
18. See Response 46 to Letter 19.
19. Forest management as set out on page 273 of the draft deals with RMU No. 4. It provides for forest reconnaissance, collection of data, and determination of management potential. This analysis of the areas cited would provide a documented record for future action. We currently have no information on these upon which to base decisions for or against timber harvesting, and no harvest proposals have been made in the RMP/EIS. If one of the areas mentioned should be proposed for harvest, it would be evaluated site-specifically through the environmental analysis process. We recognize your concerns, and they would be dealt with in a site-specific EA.
20. Ferret searches are being conducted this year. They have a high priority for the endangered species program. Additional searches would be done before any rodent control was initiated. This is part of the BLM's responsibility under the Endangered Species Act. Also see Response 54 to Letter 19.

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21. Eradicate prairie dogs without concurrent control efforts by the landowner. In no case should control work be conducted on BLM lands beyond one-half mile of the affected private land.
22. We note that eight wildlife habitat management plans (HMP's) were eliminated from consideration in the EIS (page 216). Five of these eight HMP's were eliminated in areas with extensive big game habitat for which there is little opportunity to increase big game population. Were the HMP's eliminated due to local rancher's opposition or biological factors? Habitat improvement should not be based solely upon a need to increase game population numbers but for improving habitat for all wildlife. The other three aquatic HMP's were eliminated because there was no legal access. If these areas are in poor condition, we recommend these HMP's be implemented as well as those in Appendix B: Present Land Use Decisions.
23. The Grazing Management Plan (Appendix B, page 306) strongly favors livestock forage production at the expense of other resources, especially wildlife. In addition, the Preferred Management Plan (page 274) indicates that grazing fee funds or range betterment funds would not be used to build or maintain fences that exclude livestock grazing, i.e., reservoirs, riparian areas, and recreation sites. In most cases, exclosures are designed to allow recovery of habitat from overgrazing or allow wetland or riparian areas to reestablish; therefore, we believe that these range betterment funds could and should also be made available to protect other resources from livestock overgrazing. Other livestock improvements should also be multipurpose and designed to improve or enhance the area's wildlife.
24. Page 350 of Appendix H states that no coal areas were determined to be unsuitable under Criterion 14 since the review areas contain no known federal coal lands that are high priority habitat for migratory birds of high federal interest (MBHFI). This is misleading since adequate inventories have not been conducted for most MBHFI; therefore, it is not possible to declare that area lands contain no high priority habitat for these species. Furthermore, golden eagles and prairie falcons are MBHFI and should be considered under this criterion. In the interim, until adequate inventories prove otherwise, we recommend that stipulations similar to the ones included in the Buffalo RMP (enclosed) be incorporated into this RMP.
25. Pursuant with Section 7(c) of the Endangered Species Act, as amended, BLM requested a species list from the FWS on April 24, 1984. The FWS provided the listing on May 14, 1984. It listed the bald eagle, peregrine falcon, and black-footed ferret and described the nature of their expected occurrence. We view bald eagle breeding, wintering and migration habitat management in your resource area as a critically important issue in your planning process.

21. Most prairie dog habitat in the resource area is on private land, and we have had only a few requests for control of prairie dogs on public land. Because the burrowing owl is a species of high federal and state interest, WL-7 would be applied to towns in which burrowing owls occur. As you have suggested, control would be done only where problems to private land have been documented, only in conjunction with the private landowner's control practices, and only if the lessee requested treatment. Deeded lands must be treated concurrently with public lands. Control work would not be done in towns more than 1/2 mile from private or state-leased lands. Also see Response 20, above, and Respose 54 to Letter 19.
22. The five areas with big game habitat that were dropped from consideration for HMPs are discussed in Response 9 to Letter 19. Local ranchers did not submit opinions for or against these HMP proposals. The proposals were ranked so that those with the most potential could be identified. The five areas were rated as very low in potential, since they contain extensive rock outcrops, and timber and browse are the dominant vegetation. Lack of water was identified as a limiting factor for these HMP proposals.

We appreciate your comment that wildlife habitats can be improved for many species, including big game, without the increase in populations being the necessary requirement. Water could be provided to benefit livestock and wildlife through the range improvement program; writing an HMP would not be necessary. No other improvements have been proposed that would justify the writing and implementation of HMPs for these areas.

The three aquatic areas are the Dry Fork of LaPrele Creek, LaBonte Creek, and Bishop Point. They contain 1/2

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25 Coordination under provisions of Section 7 has not been completed between BLM and FWS for these endangered species. Specific endangered species' concerns or issues will be addressed by FWS at a later date through the consultation process. We welcome the opportunity to work with your agency regarding our joint responsibilities to listed species in your area.

Acting

Michael J. Mc

Enclosure

cc: W/encl.
Regional Director, FWS, Denver, Colorado (ES)
Field Supervisor, FWS, Billings, Montana (ES)
Team Leader, FWS, Helena, Montana (SE)
Director, Wyoming Game and Fish Department, Cheyenne, Wyoming
State Director, Bureau of Land Management, Cheyenne, Wyoming

mile, ¼ mile, and ⅝ mile of stream, respectively. The first two, in the foothills of the Laramie Range in Converse County, contain a narrow band of riparian habitat. Bishop Point is 4 miles north of the Natrona County airport, near Casper. It has a wet meadow riparian area on Casper Creek. While these three areas do have potential for wildlife habitat improvement, the areas rank lower in potential than the HMP proposals identified in the preferred alternative (Alternative 4, page 53 of the draft RMP/EIS).

23. We do not agree that the grazing portion of appendix B favors livestock forage production at the expense of wildlife. Most projects (reservoirs, wells, brush control if fire creates a mosaic pattern) would benefit wildlife as well as livestock. Fences and some brush control would not benefit wildlife; however, these projects would be coordinated with WGFD to minimize their impacts to wildlife. Also see Response 3 to Letter 19.

Prairie dog control would not be designed to eliminate the species from the resource area. See Response 54 to Letter 19 and Responses 20 and 21 to Letter 31.

Our discussions of not using grazing fee funds for some fencing may be clarified if we add that we would not use these funds when livestock will be permanently excluded. However, we could use range betterment funds to defer areas from livestock grazing temporarily.

24. We disagree that the statement that no known federal coal lands are high priority habitat for migratory birds of high federal interest is misleading. No priority habitat was identified in inventories conducted in September 1982. Golden eagles and prairie falcons were considered in the 1982 inventory under criteria 11 and 13. The USFWS did express concern about habitat protection during the 1982 inventory. In view of your concern, we have adopted your recommendation to include the following provisions:

After an expression of interest is filed and before tract delineation, the BLM will further inventory a proposed tract area and adjacent land during the coal activity planning phase to refine the application of criterion 14. If the inventory reveals the presence of species or habitats affected by this criterion, the BLM will coordinate with the U.S. Fish and Wildlife Service to determine if any federal coal lands within the proposed tract area should be declared unsuitable, if the exception contained in the criteria could be applied, or if impacts could be mitigated.

Possible mitigating measures may include but would not be limited to, (a) construction of nesting platforms, rock cairns, or other types of structures to provide nest sites where they are unavailable or will be destroyed by mining; (b) planting of cottonwoods or other trees in suitable areas to provide future nesting sites; (c) establishment of permanent vegetative cover that will support a diverse prey base for raptors; or (d) provision of wooden fence posts and/or rock outcrops on sites where natural perches have been destroyed.

25. We consider management of bald eagle habitat our high priority wildlife issue. We believe the preferred management alternative, along with the decisions in appendix B, will provide for maintenance of this habitat. We have sent the USFWS a biological assessment describing the possible impacts of the RMP/EIS on habitat of the listed species.

We anticipate that further consultation will take place through the specific management plan (Jackson Canyon ACEC/HMP) and as specific projects may be implemented near bald eagle habitat.

Comments and Responses

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United States Department of the Interior

BUREAU OF RECLAMATION
NORTH PLATTE RIVER PROJECTS OFFICE
P. O. BOX 1650
MILLS, WYOMING 82644

IN REPLY
REFER TO: C-420
120.1

JUN 13 1984

Memorandum

To: Jim Melton, Area Manager, Platte River Resource Area, 951 Rancho Road, Casper, Wyoming 82601

From: Project Manager

Subject: Surface Ownership - Platte River Resource Area

1 Enclosed for your use in correcting Map 2, Surface Ownership of the Platte River Resource Area - Draft Resource Management Plan - Environmental Impact Statement, are copies of maps showing the Bureau of Reclamation's property boundaries at Pathfinder, Alcova, Gray Reef, Glendo and Guernsey Reservoirs.

If you have any questions, please contact Tony Morton of this office at FTS 328-5664.

David B. Wells

Enclosures

Response to Letter 32

1. Thank you for your interest and information. Map 2 in the RMP/EIS is at a fairly small scale; therefore, it tends to portray a generalized ownership in smaller areas such as those encountered around Bureau of Reclamation reservoirs. In reviewing the submitted maps, we find no major errors on that map that would warrant the cost of reprinting the map. Map 2 represents a fairly accurate delineation of Bureau of Reclamation boundaries at Pathfinder, Guernsey, and Alcova reservoirs. The boundary at Glendo Reservoir is very close to the actual shoreline, and this makes it difficult to map the small land areas administered by your agency. Gray Reef Reservoir is not portrayed on the map because of its small size.

One concern we note from the submitted maps is the Wendover site in the NE¼ and the NW¼ SE¼ of section 10, T. 27 N., R. 67 W. This parcel is BLM-administered land that is under a special land use permit to the state of Wyoming for use in conjunction with Camp Guernsey. We have no records indicating that the Bureau of Reclamation administers this parcel.

33A

Southern California Edison Company

P. O. BOX 410
1 - LONG BEACH BLVD.
LONG BEACH, CALIFORNIA 90801

C. J. LOWERISON, JR.
MANAGER
PLATE RIVER PROJECTS

June 11, 1984

Mr. Jim Melton
Area Manager, Platte River Resource Area
951 Rancho Road
Casper, Wyoming 82601

Dear Mr. Melton:

SUBJECT: Platte River Draft RMP/EIS

Southern California Edison Company appreciates the opportunity to comment on the above subject RMP/EIS.

Based on our review and our current information, we have the following comments and recommendations for your consideration.

We are pleased to see the designation of corridors included as an issue in the four alternatives to be considered for the RMP.

The Southern California Edison Company participated in the preparation of the 1980 Western Regional Corridor Study, which identified the existing and future need for planned utility corridors that will meet the future energy demands of the eleven Western States through the year 2020. We believe that corridor designation is an important and critical element of land use planning and is an important planning tool for both land managers and the utility industry.

1 Identification and designation of corridors in the land management planning process will assure maximum public participation insuring that all resource values are identified and considered in their selection. Designated corridors should be of sufficient width to provide the necessary routing flexibility to avoid or mitigate adverse impacts to environmentally sensitive areas located within the corridor.

2 While we have not identified any specific corridor requirements that would affect the Platte River Resource Area, we do recommend that corridors be designated in the locations recommended by the Western Regional Corridor study to be included in all Land Use Planning.

Responses to Letter 33

1. The corridors designated in the RMP should provide adequate width to accommodate what we anticipate the future utility needs will be in this area for the next five to ten years. A 16-inch diameter oil pipeline was constructed recently, and we are now in the EIS process for a 230/345 KV power line. Given these two new projects and existing major facilities, we do not anticipate many additional major rights-of-way within the life of the plan or in the long term. Therefore, the designated corridors should be adequate to provide the needed flexibility so that sensitive areas will not be affected. Also see Response 1 to Letter 30.
2. Contrary to the 1980 Western Regional Corridor Study, we have not designated all the identified corridor locations. Corridors have not been designated in Converse, Platte, or Goshen counties because public lands in these counties are scattered and the quantity is limited. Such designations would be contrary to the established criteria and current policies. Major utility lines in these areas would be considered case by case if they crossed public land administered by the BLM, and mitigation would be applied where necessary.

Many of the corridor routes in Natrona County that were identified in the 1980 study have been designated. One exception is the North Platte River corridor, which will be eliminated in favor of a new corridor located north of the Oregon Trail Road. The river corridor was eliminated because of the effects its continued use would have on recreation, scenic and visual quality, and soils and watershed. This new corridor is the preferred route to be used by the 230/345 KV line mentioned above.

Comments and Responses

33B

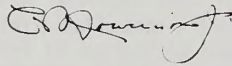
Mr. Jim Melton

-2-

June 11, 1984

Thank you for inviting our comments, we hope you will give them your full consideration in the preparation of the RMP. If further details are needed please contact Mr. L. R. Salas of this office at (213) 491-2849.

Very truly yours,



818f

34

June 18, 1984

Bureau of Land Management:

Dear Sirs:

In response to your letter of April 18, 1984:

- 1** The J Y Ranch of Platte County, Wyoming is well satisfied with the present leasing of BLM lands.

We feel that the BLM lands are a must for us to have, to continue ranching.

- 2** Due to cattle prices and high interest rates we feel that lands to be sold should be appraised as to the A. U. carrying capacity.

Most BLM lands on the JY are scattered and below average production.

- 3** We would hate to see some big shot money man put an unreasonable bid on BLM lands just for recreation etc. Ranchers prefer the lands remain under the good leasing plan of the BLM.

Sincerely,

Laurence Rosentreter
JY Ranch Inc.

Laurence Rosentreter, PRES.

Comments of Diamond Ranches of Chugwater, WY:
John and Ruth Braunschweig, owners, prefer leasing the BLM lands as of now.

Responses to Letter 34

1. Thank you for your comment.
2. Our authority to sell public land comes from Section 203 of the Federal Land Policy and Management Act (FLPMA) of 1976. FLPMA requires that BLM receive no less than the fair market value of the public lands in any sale. The fair market value of a particular parcel is determined by means of an appraisal. The major components of the appraisal process are (a) definition of the appraisal problem; (b) preliminary requirements and appraisal plan; (c) data collection and analysis; (d) application and reconciliation of value indications; and (e) a final estimate of value.

Within this process are several components whose definitions relate directly to the appraisal of land (surface estate only). First, the appraisal must determine fair market value. This is defined as the amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would be sold by a knowledgeable owner willing, but not obligated, to sell to a knowledgeable purchaser who desires, but is not obligated, to buy. It is quite apparent from this definition that the appraiser must consider the broad market, not just specific individuals. Other similar definitions refer to the "typical" buyer and the "typical" seller.

Second, the appraisal must find the fair market value of the property based on it "highest and best use." This can be defined as the use that is reasonably probable and which will produce for the typical owner the highest net return or benefits to the land and yet preserve the future utility of the property. The appraiser must determine what uses are reasonably probable and then find the one that is

Comments and Responses

most profitable. Rangeland that is in or near areas of development may not have a highest and best use of agricultural grazing. The highest and best use could be residential, recreational, industrial, or other uses, which could significantly affect the fair market value.

The whole appraisal process is designed to enable the appraiser to find out what the market is for property in a given area. The best way to do this is to identify actual market sales of properties similar to the one being appraised. The appraiser then discusses each sale with the buyer, the seller, or both to determine what factors had an effect on the final sales price. By analyzing a number of these sales, the appraiser is able to understand the market forces affecting value. This understanding is then applied to the property being appraised, and all the factors that affect value are considered. By comparing the subject property to actual sales of similar properties, the appraiser can reach an accurate determination of the fair market value of the property.

The carrying capacity of a parcel is one of the factors that determines market value, and it is considered during the appraisal process. However, it is not the only consideration, and an appraisal is not based solely on AUMs.

3. The method of sale is determined on case by case after an on-the-ground inspection of the property. However, the following general rules apply:

Competitive Bidding. Competitive sales are made when the land to be sold has legal public access or when it has potential for community expansion or for residential, commercial, or industrial development. Competitive sales are open to all qualified bidders. Bidding is by sealed bids. If sealed bids of the same amount are received, a drawing determines the successful bid.

Modified Competition. Modified competitive sales are used when a parcel has no legal public access and when the property of two or more landowners surrounds the public land. These sales are also held by sealed bids followed by a drawing, and competition is limited to the owners of adjacent property.

Direct Sales. Direct sales are made when a parcel has no legal access and the property of a single landowner surrounds the parcel. Direct sales are made to that owner at the fair market value without any competition.

Comments and Responses

35

June 18, 1984

Raymond Stroup
B.L.M. Office
11 South Walcott Room 111
Casper, Wyoming 82601

Dear Sir:

- 1 Please be advised that I strongly oppose the proposed easement to the upper Laramie River in Platte County that involves part of my property.
- 2 I fear this will compound the already existing problem of littering, trespassing, and fence cutting. We also have a serious problem of tree cutting in December which is defoliating the area disastrously.

I would appreciate your consideration.

Thank you,

Willard M. Woods
Willard M. Woods, M.D. FACOG
1355 Shiek Street
Wheatland, Wyoming 82201

Responses to Letter 35

1. This is an area with very good potential for developing a public fishing area. It should not be dropped completely from consideration at this time. The BLM is aware of the problems of littering, trespassing, and fence and tree cutting. The easement would not be acquired unless BLM could provide public management, enforcement, and maintenance. In light of the two comments specifically objecting to the Upper Laramie River easement, it will be placed as one of the lowest priorities for acquisition.
2. Many of the identified problems could be resolved by implementation of a management plan for the area. The plan would include construction of a parking area with vehicle barriers, and access to the river would be on foot. Trash would be handled on a carry in-carry out basis. Signs could be posted to reduce trespassing and vandalism on private lands. Acquisition of the easement would also provide some funds to road maintenance.

36



Laramie River Ranch
Richard Edwards
Licensed Outfitter and Guide

Hall, Route Box 8505
Phone 307-322-1921
Wheatland, Wyoming 82201

June 15, 1984



Dear Mr. Stroup,

[Typed reproduction of handwritten text of letter]

- 1 After visiting with you in the Casper office and learning just what your full plan was for the proposed access easement on the upper Laramie River I am writing to let you know I am against an easement through our land.
- 2 The major problem would be controlling the trespassing on my private land, the littering along my driveway, and the destruction of my driveway from additional traffic.

I would like to thank you for the draft of the environmental impact statement. It let us know what is going on and how it will affect this area. I thought the draft was very complete and informing.

Sincerely,
Richard Edwards

Responses to Letter 36

1. See the response to Letter 35.
2. Thank you for writing. We appreciate your support.

Comments and Responses

37A



Natrona County Planning Commission

and

Natrona County Planning Department

P.O. Box 810 - 314 Wyoming Blvd
Mills, Wyoming 82644
Phone (307) 235-9435

June 20, 1984

Mr. Jim Melton, Area Manager
Platte River Resource Area
Bureau of Reclamation
P. O. Box 630
Mills, WY 82644

Dear Mr. Melton:

1 I have just completed review of the Platte River Resource Area Resource Management Plan Draft Environmental Impact Statement, and I wish to compliment you and your staff on a job well done. During the course of the project, I had several opportunities to meet and discuss the RMP with representatives of the "team." I believe that you have truly met the mandate of the National Environmental Policy Act by not only allowing for citizen participation, but actually encouraging it. The text and organization of the RMP make to very readable and the maps will be an asset to anyone who has them in hand. In addition, I believe the recommendations and policy direction are realistic and in tune with the needs of Natrona County.

I have three suggestions that I wish to make:

- 2 1. The use of "prescribed burns" on Casper Mountain may not be an advisable method of forest management because of the presence of numerous residential structures in a relatively confined area and the proximity to privately owned lands.
- 3 2. The two general utility corridors approaching Casper from the west and southwest are acceptable in the less populated areas of the County, but could lead to land use conflicts in their approach to the urbanized area. I believe that the preferred corridor identified by the Thermopolis - Alcova - Casper Transmission Line Project Draft Environmental Impact Statement is a more acceptable alignment, specifically, as it enters the populated areas.
- 4 3. The success of the ORV use in the Poison Spider Area will be dependent upon proper patrolling and demarcation of property boundaries. I suggest that the responsibility for enforcement and the signing of the area be resolved in advance.

Responses to Letter 37

1. Thank you. We appreciate your support.
2. The draft RMP/EIS addresses the anticipated use of prescribed fire in the Casper Mountain/Muddy Mountain RMU in the section that begins on page 248. A total of 1,100 acres is estimated for areas within four grazing allotments and at least three forestry areas that could benefit from the use of prescribed fire. With the exception of two dwellings on the far west end of the mountain, BLM lands with known potential for prescribed burning are at least 1.5 miles from residential structures. Also see Response 1 to Letter 19.

Sagebrush control has been addressed as a management need in at least three pastures of the two "I" category grazing allotments lying within or bordering the Casper Mountain Plan boundary. Prescribed burning will be the major means of control considered for these pastures, although some areas may be best controlled by chemical means. In addition, prescribed fire is an effective tool in forest management for disposing of timber sale residues, thinning, preparing sites for reforestation, and for control of mountain pine beetles. Any such projects will be planned in close coordination with owners of adjacent state and private land.

3. Four utility corridors are identified in the western half of Natrona County. They extend from the northwest along U.S. 20-26, from the west along Poison Spider Road, and from the southwest along the Oregon Trail Road and the North Platte River. They converge in Casper. As explained in Response 1 to Letter 30, two will be replaced.

The area near Oil Mountain is narrow and may be filled before long, and the Emigrant Gap area is full. Response 1 to Letter 30 describes plans for corridors in the Oil Mountain area.

The convergence of the corridors in Casper can result in serious routing and land use conflicts because of urban/suburban land use in the area. However, the BLM has little control over the site-specific routing in this area since all of the land is privately owned. We also have little choice about using this area as a terminal point of the corridors since the products are used in or retransported from Casper. The identified corridor is sufficiently wide around the city to provide some flexibility in the final destination of the utility lines.

4. We agree that ORV use of the Poison Spider Bentonite Pit Area will necessitate good planning, on-site management, use supervision, monitoring, and enforcement. The Natrona County Commissioner's Office and Planning Commission Office will be consulted and involved throughout the project. The Sheriff's Department will also be consulted in advance. We appreciate your cooperation.

37B

Mr. Jim Melton
June 20, 1984
Page 2

I would be happy to discuss these suggestions in more detail. Again, good job.

Very truly yours,

Max L. Torbert

Max L. Torbert
County Planning Director

MLT:mcb

cc: Frank L. Schulte, Chairman
Board of County Commissioners

Comments and Responses

38A

EXXON COMPANY, U.S.A.
POST OFFICE BOX 129 - DENVER, COLORADO 80201

EXPLORATION DEPARTMENT
WESTERN DIVISION
H. W. PRAETORIUS
MANAGER

June 21, 1984

Mr. Jim Melton
Platte River Resource Area
Bureau of Land Management
951 Rancho Road
Casper, Wyoming 82601

Dear Mr. Melton:

Exxon Company, U.S.A. welcomes this opportunity to comment on the Draft Resource Management Plan and Environmental Impact Statement (DRMP/EIS) for the Platte River Resource Area. Exxon has a strong interest in the planning process for federal public lands because many of these areas, especially in the Powder River Basin, have potential for additional discoveries and production.

We find it encouraging that the Platte River Resource Area DRMP/EIS effort recognizes the substantial benefits mineral development has had in the region. More importantly, we find evidence of the Bureau of Land Management's continuing concern for and anticipation of additional growth in oil, gas, coal, uranium, and other mineral interests.

1 Exxon endorses the BLM's recommendations in the Platte River Oil and Gas Environmental Assessment. We concur with your decision to continue oil and gas leasing subject to standard stipulations, and understand special stipulations may be added on a case by case basis only after field examination. Leasing activities conducted in this manner allow for both surface resource protection and exploration opportunity in oil and gas.

The BLM's decision to defer coal leasing in areas which already produce oil and gas is also endorsed by Exxon (Appendix H: "Summary of Coal Planning"). The Powder River Basin is rich in natural resources, and as such, presents a challenge in land planning and land management decision-making. Exxon welcomes your recommendations for the maximization of production whether it is coal or oil and gas, and secondly, that full resource development should occur without detriment to another resource.

A DIVISION OF EXXON CORPORATION

Response to Letter 38

1. Thank you for your comments. We appreciate your support.

38B

Mr. Jim Melton

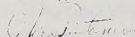
- 2 -

June 21, 1984

1 The BLM's decisions and recommendations represented in the Platte River DRMP/EIS will help assure the full enjoyment and benefits of balanced resource management. Consequently, Exxon urges the BLM to implement the "Preferred Management Plan" as outlined in the Platte River area DRMP/EIS document and to continue its present course in the application of the multiple use and sustained yield concepts.

Thank you for the opportunity to comment and your consideration of our views. We look forward to future opportunities to participate in the Bureau of Land Management planning process. Please feel free to contact Mr. Fernando Blackgoat on our staff at (303)-789-7488 if, at any time you wish to discuss this further.

Sincerely,


H. W. Praetorius

F82886

c - Mr. W. B. Bickley
Mr. R. R. Dern
Mr. W. R. Campbell
Mr. J. A. Holliday
Mr. A. A. Plante
Mr. H. E. Repp
Mr. C. L. Wilmott

Comments and Responses

39



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
1860 LINCOLN STREET
DENVER, COLORADO 80295

Ref: BPM-EA

Jim Melton, Area Manager
Platte River Resource Area
Bureau of Land Management
111 S. Walcott Street, Room 111
Casper, Wyoming 82601

Dear Mr. Melton:

1 The Region VIII Office of the Environmental Protection Agency (EPA) has completed its review of the Platte River Resource Area draft Environmental Impact Statement (OEIS)/ Resource Management Plan. We have reviewed a number of draft Environmental Impact Statements/Resource Management Plans prepared by the BLM in Region VIII. You are to be commended for the thorough analysis of environmental consequences on the respective Resource Management Units (RMU). The individual RMU prescriptions blend well into the overall preferred plan.

A concern exists with the level of total dissolved solids (TDS) and total suspended solids (TSS) concentrations in the North Platte River. Both the 1982 Wyoming Section 305(b) Water Quality Report and the Wyoming State Conservation Commission have listed this stream segment as a high priority water body. Their concern is based primarily on water quality degradation from agricultural activities, mainly grazing.

2 Implementation of the preferred management plan should result in continued gradual improvement of water quality problems. We recommend that BLM consider developing a monitoring plan to assess the effectiveness of the preferred management plan in controlling TDS and TSS contributions from managed lands.

3 According to the procedures EPA uses to rate draft EIS's, a rating of LO-2 is assigned. This means that we find no significant environmental objections to the project as proposed. Should you have any questions, please contact Mike Hammer of my staff at FTS 564-2351.

Sincerely yours,

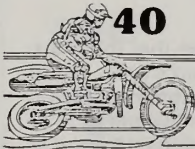
E. M. Hoffbuhr

Jack W. Hoffbuhr
Acting Assistant Regional Administrator
for Policy and Management

Responses to Letter 39

1. Thank you for your comments. We appreciate your support.
2. A monitoring plan will be implemented.
3. Thank you for your cooperation.

40



HIGH PLAINS DRIFTERS MC
CASPER, WY
P.O. Box 1111 82602

June 26, 1984

Platte River District
Bureau of Land Management
601 Rancho Road
Casper, WY 82601

Attention: Mr. Jim Melton
Mr. Ray Stroup

Dear Sirs:

1 We, of the High Plains Drifters Motorcycle Club, would like to express our extreme pleasure concerning the proposals laid before us by Mr. Stroup of your office.

As we who enjoy Off Road Vehicle (O.R.V.) recreation know, vast areas of land once available for public use have been closed in the past few decades. Some of the land was private, most was either State or Federally administered. We do not argue with the closing of areas that are environmentally sensitive or sensitive wildlife habitat. These closures are indeed right, just and necessary.

However, as available O.R.V. areas commonly used have drastically decreased, O.R.V. use and most particularly motorcycle use has increased just as dramatically. Considering that Wyoming is one of the most rural states, off-road motorcycle purchases and use has increased far more rapidly than road-use motorcycle registrations would indicate.

Therefore, the proposed opening of a test area for exclusive O.R.V. use is not only welcomed by the club because we are O.R.V. enthusiasts, but we consider it to be a sound and practical device to lower the psychological pressure and frustration caused by the afore-mentioned land closures.

It gives us great pleasure to see your agreement to the initiative in this project to open the Poison Spider Bentonite Pit area to useful recreational activities without incurring the cost of extensive reclamation. As a volunteer community effort, we can think of no examples that provide so many physical and mental benefits to the public at such a low cost. The reduction in frustration-produced vandalism alone would justify the rest of the agencies of government throughout the state in taking a good, long look at the practicability of this type of O.R.V. Project.

Sincerely,

Don O'Donnell

Don O'Donnell, President
Tom O'Donnell, Vice President

Response to Letter 40

1. Thank you for writing. We appreciate your support for an open ORV area at the Poison Spider Bentonite Pit area.

Comments and Responses

41

A-A
CATTLE

Cole Creek Sheep Company

1134 SO WOLCOTT
CASPER, WYOMING

7
SHEEP

Jim Melton District Director
Bureau of Land Management
951 Union Ave.
Casper, Wyo 82601

Dear Jim,

- 1 I am writing with regard to the Area Management Plan which we reviewed some time ago and which we will discuss again in August. On balance I was very pleased with your office's work. All aspects of the plan were very well thought out and clearly demonstrated careful consideration of the needs of the many user groups of public lands.
- 2 I would like to comment on two aspects of the plan. The first is the issue of the B.L.M. purchasing access to isolated areas of public lands. It seems to me, that while there is sometimes conflict over access between grazing lessees and sportsmen or others, that this conflict or its potential is actually a healthy thing. It may be a terrible headache for your people, but in a broader sense it helps to maintain a check and balance on both sportsmen and ranchers. We both know that in reality ranchers need hunters to reduce game numbers and hunters need the ranchers to maintain quality hunting areas. When either side gets too much of an upper hand either access fees get unreasonable or the quality of the public land is diminished by careless users. It would seem very beneficial for the B.L.M. to take a more active role in fostering cooperation between grazing lessees on the one side and sportsmen and game and fish personnel on the other. How is that for a tough task? I know you all have been working on this idea already. I just want to encourage your efforts.
- 3 The other item I would like to comment upon is the desirability of a watershed and soils plan for the "Sand Hills Area." In the first place the only thing that distinguishes this area is its close proximity to Casper. I am sure the B.L.M. has larger blocks of sand hills country in this State. (Correct me Aug. 1, if I am wrong.) In the second place we both know that the only soils type in the area is sand and that the only reliable water is the windmills I maintain. It does not seem to be necessary to spend more money studying an area which is really not very significant or complex. I look forward to seeing you on the first and will enjoy hearing your responses to these ideas.

Best personal regards,

Don C. Nicolaysen

Responses to Letter 41

1. Thank you for your comments. We appreciate your support.
2. We propose to acquire easements on 17 roads covering 38 miles. A list of these roads is included in appendix B of the final document. The locations and lengths do not include BLM land crossed by these roads. In addition, we will continue to encourage cooperation and discussion between BLM, ranchers, and sports enthusiasts, and we will seek cooperative access agreements where needed to enhance public land use.
3. The intent of the proposed study and subsequent management plan for the Casper Sand Dunes is to determine if active dunes in this area are the result of human activities such as grazing and surface disturbance or if they were caused by natural forces. If they are the result of human actions, the feasibility of reclamation will be determined and management decisions will be made to prevent loss of fragile soils and vegetation by blowing and drifting sands. If the active dunes are the result of natural forces, we will still seek to manage the area for range, wildlife, and other resources present. Management will be in cooperation with the landowners and the Wyoming Game and Fish Department.
4. While it is likely that year-round sources of water are windmills, there typically are water holes in sand dune areas that provide breeding habitat for waterfowl and shore birds, as well as for amphibians. Such sources also provide seasonal water for other wildlife and for livestock. As we indicated on page 243 of the draft, this type of area is rare in the Platte River Resource Area and warrants management.

42A

NATRONA COUNTY FARM BUREAU
Comments on Platte River Resource Area
Resource Management Plan, Draft E.I.S.

The Natrona County Farm Bureau is part of an all inclusive agricultural organization representing a broad range of interests. In Natrona County most of our producer members are in the livestock industry. All of the rangeland, and most of the cultivated land, is devoted to livestock production. Because of the intermingling of public and private lands, we are concerned with public land management.

- 1 A general comment we would like to make is that the draft plan is detailed, and certainly meets all the requirements of the various Acts of Congress. In fact, it is probably more detailed than most of the many multiple users would require. We recognize the pressure of the N.R.D.C. lawsuits, and the threat of future suits, to prepare an all inclusive plan.
We appreciate the efforts of the Platte River and Casper District to produce a complete plan at lower cost than any other District. As citizens, we are concerned that this cost (estimated \$250,000.00 for the final plan) will not have to be duplicated. We are hopeful that the adoption of the plan will substantially reduce operating costs of this District.
A more specific general comment that we would like to make is, that there are areas designated as critical for various wildlife uses and environmental concern, but nowhere is there mention of areas critical for livestock use. In every range operation there are particular parts of the range critical for winter use, and especially critical for spring lambing and calving operations. May we remind you that one of the original stated goals of the Taylor Grazing Act was to promote the stability of the livestock industry dependent on the public domain.
- 2 As far as grazing management is concerned, we are pleased that all the small and isolated tracts are placed in the custodial class. We would suggest that any allotment with less than 40% public land ought to be in the custodial class, unless the permittee specifically requests "M" or "I" classification.
- 3 We approve the stated plan to use any available improvement money on "I" class first, and "M" class next, with probably none on "C" permits. We are particularly appreciative of the efforts of the Platte River Area B.L.M. personnel to improve and maintain the stock driveways which benefit many people.

Responses to Letter 42

1. Thank you for your comments. We agree that there are areas critical to livestock use in the resource area. These areas were not addressed in the plan because no specific problems with them were identified, nor have the BLM or the operators identified these areas as being affected in this plan. We are not aware of any problems regarding these areas.
2. The criteria we used for categorizing allotments included many items, of which percentage of federal range was only one. We did not place an allotment in a category without consultation with and the agreement of the rancher. If for some reason the rancher did not fully understand the categorization process, or if a rancher should have new data to offer that might affect the category of the allotment, we will consider a change in category. We anticipate some changes in categories as the RMP is implemented and mutual goals are achieved over a period of time.
3. We have recommended big game population levels to WGFD. The levels are long-term objectives to be reached and maintained.
4. The portion of the sand dunes that is called "Casper Sand Dunes" and is designated a fragile area consists of approximately 22 sections of public land in a solid block. There are no private lands within this block. Four sections of state owned lands border this public land. At present there is no public access; however, off-road vehicles and motorcycles seem to have no problem in gaining access to the area.

Comments and Responses

42B

3 We note the stated goal of matching wildlife numbers by recommendation of hunting goals to the Wyoming Game and Fish Commission to limit breeding herds to available forage commensurate with permitted livestock. The plan specifically mentions some areas of surplus antelope. While the devastating winter and spring of 1983-84 reduced both livestock and game numbers, the goals should be continued so we do not repeat the overpopulation of game in some areas.

4 In the Sand Dunes area we would like to point out that the majority of the area is privately owned, and that there is no public access. We note the preferred management alternative of designation as a fragile area with limited use and the proposed development of a soil-watershed plan. In view of the smaller amount of public land, and no public access, we wonder if this is necessary. After all, in the past fifty years, the range has improved under largely private management.

5 In the Bates Hole area, we are pleased that the preferred management plan includes implementation of the Bates Hole watershed and silt control plan. We suspect that the reason the B.L.M. is currently engaged in monitoring the streams of the area is to build a data base to support future expenditures to satisfy O.M.B. and other federal agencies. In 1951, B.L.M. and the Bureau of Reclamation jointly determined that 50% of the silt going into the Platte River below Alcove came from this area, and also developed a plan of control. We can't believe that the geology, soil type, steepness of slope and arid conditions that cause silt are any different in 1984 than in 1951. Any available money will be much better used if applied to actual construction of control structures than to additional studies.

On this same topic, we are pleased to note that the plan calls for continued monitoring of silt in Cloud Creek, as well as some other drainage in the Salt Creek and South Big Horn areas. We recommend that as soon as monitoring demonstrates that there is a need on part, or all of a drainage, that any available improvement money be used to construct some control structures without waiting for final studies and a complete watershed plan. When we say control structures we mean it in a broad sense in that it may be in several forms, and that there can be accompanying suitable revegetation and possibly some accompanying fence, as may be appropriate in each case. We suspect that both the Bates Hole and Cloud Creek erosion control will be continuing projects over a period of years. Funding seldom comes all at once.

The reasoning behind designation of the area as fragile is that sandy soils are highly susceptible to wind erosion when the surface has been disturbed. There are numerous active sand dunes in this area now. Also see Response 3 to Letter 41.

5. The BLM's monitoring of streams in the Bates Hole as well as all other streams in the Platte River Resource Area is in response to the Federal Land Policy and Management Act, Section 201, which states in part "the Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values". It goes on to say "this inventory shall be kept current so as to reflect changes in conditions and to identify new and emerging resources and other values".

In addition to meeting those requirements, information acquired in these inventories is being used to isolate areas of severe erosion, so that projects can be concentrated in those areas. Data acquired in the 1951 Bates Hole study and in other studies conducted by the BLM and the SCS are being utilized in the development of the Bates Hole Plan.

6. Prairie dog control in the PRRA is not a program designed to eliminate prairie dogs. See Response 54 to Letter 19 and Responses 20 and 21 to Letter 31.

There is no proposal to transfer of ferrets into the resource area.

42C

6 Another problem of concern to us is that of prairie dog control. The plan suggests that in any locality where no black footed ferret have been sighted for a five-year period, that control be permitted. We recommend in those localities that B.L.M., or the permittee, Weed and Pest District, or a combination proceed immediately with dog control. This is particularly true where the permittee is treating adjacent private lands. Prairie dog control is an ongoing thing that must be continued every year. It is unthinkable to us that B.L.M. could permit the Fish and Wildlife Service to transfer any ferrets to an area not already infested.

We wish to thank the B.L.M. for this opportunity to comment on the Platte River Resource Management Plan.

Walter J. Jendal
Director, Wildlife Division
Natural History, State Museum

Comments and Responses

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PLATTE RIVER RESOURCE MANAGEMENT PLAN MEETING - AUG. 1, 1984

AGENDA

I. INTRODUCTION - Jim Melton, Platte River Resource Area Manager

II. PLANNING SCHEDULE AND PROCESS - Ray Stroup, RMP Team Leader

III. SUMMARY OF GRAZING PORTION OF RMP - Terry Matchett

IV. INFORMAL DISCUSSION OF ALL PARTS OF THE RMP - All RMP Team Members

V. WRITTEN COMMENTS ON RMP - If you have written comments on the RMP, please note below and on the reverse side of this page and return to us at the end of the meeting.

NAME	ADDRESS	PHONE NO.
Charles Scott	5805 Bates Creek Route	473-2512

1. Major deficiency in EIS - no discussion of a custodial management type of alternative - much like State of Wyoming uses on State land.
2. Due to poor economic condition of cattle business, be very careful on any restrictions that would have an adverse economic impact on ranchers.
3. Avoid any prairie dog poisoning in the Bates Hole area. There have been too many back-forted ferret sitings, although none of these has been confirmed.
4. Weed and pest control efforts are almost always harmful to the environment and a waste of time and money for the rancher. Suggest these be undertaken only if rancher is willing to pay.
5. Tree cutting for pine beetle control in eagle roost areas (Jackson Canyon ACEC) should not be used. Use beetle traps instead.
6. Fire is proving to be very successful in controlling sagebrush based on our experience on the Bates Creek Cattle AMP.
7. I urge more AMP's. Ours has been very successful in improving range conditions.

Responses to Letter 43

1. The BLM has not considered the custodial type of grazing management such as the Wyoming State Lands Commission uses in administering grazing because it would clearly conflict with federal laws such as FLPMA and would not allow us to accomplish some of the things that BLM is mandated by law to do. These include managing grazing leases through grazing systems, maintaining or improving range condition, working cooperatively to maintain and improve important stock driveways withdrawn specifically for livestock movement to and from summer ranges, and working with lessees to continue to update and verify changing range conditions.
2. A ferret search will be conducted on public lands before any treatment is approved. No prairie dog control measures will be allowed on public land in areas where black-footed ferret sightings or confirmed sign have been recorded within the past five years, or if the USFWS considers the town important habitat for the survival of the ferret.
3. A criterion for expenditure of federal funds for weed and pest control in the Platte River Resource Areas is that weed and pest problems on adjacent private lands must also be treated.
4. The BLM has introduced beetle traps and baits this year on an experimental basis in areas adjacent to roost areas. These will be evaluated for effectiveness and cost efficiency. Specifics regarding tree cutting within the roost areas will be addressed in the ACEC Habitat Management Plan.



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APPENDIX B: PROPOSED RMP DECISIONS

Introduction

The decisions contained in this appendix will be the planning decisions that guide management for the public lands in the PRRA for the next ten or more years. The decisions detail the prescriptions for RMUs 1 through 14. All land use proposals will be evaluated for conformance with these decisions.

Constraints on Surface Development

Decisions marked with an asterisk in the list below constrain, prohibit or limit surface development. These apply to all land use proposals that involve surface development. The appropriate land use decisions will be found in the following pages in the same sequence by the program numbers noted below. The maps in Volume II of the draft RMP/EIS define the areas where the decisions apply. Those maps are for graphic purposes only. Specific locations are shown on detailed maps in the PRRA office in Casper.

Cultural Resources (map 4)

- *C1 Spanish Diggings
- *C2 Oregon Trail
- *C3 Bozeman Trail
- C4 Establishment of data base
- C5 Protection of cultural sites

Energy and Minerals (maps 5, 6, and 7)

- M1 Oil and gas
- M2 Coal
- M3 Salable minerals
- M4 Locatable minerals

Fire Management

- FM1 Prescribed burning
- FM2 Heavy equipment use
- FM3 Fire suppression in bald eagle roost areas

Forest Management (map 8)

- F1 Forest management plans
- F2 Allowable cut
- F3 Harvest in the Muddy Mountain EEA
- F4 Forest demonstration area

Grazing Management (maps 9 and 10)

- G1 Grazing lease administration
- G2 Weed and pest control
- G3 Stock driveways

Lands (maps 11 and 12)

- L1 Land disposition
- *L2 Withdrawals
- L3 Corridors
- L4 Access

Recreation Management (map 13)

- *R1 Recreation area management plans
- R2 Off-road vehicles
- *R3 Environmental education areas
- *R4 Visual resource management

Soil, Water, and Air (maps 14, 15, 16, and 17)

- SWA1 Watershed plans
- *SWA2 Surface water protection
- *SWA3 Soils
- *SWA4 Slope restrictions
- *SWA5 Cedar Ridge
- SWA6 Winter construction
- SWA7 Fencing reseeded sites
- SWA8 Reseeding
- SWA9 Fragile areas
- *SWA10 Rims and Gorges

Wildlife (maps 18, 19, and 20)

- *WL1 Habitat management plans
- *WL2 Antelope habitat management
- *WL3 Deer habitat management
- *WL4 Sage grouse leks
- *WL5 Critical winter range for elk
- *WL6 Bald eagles
- *WL7 Raptors
- WL8 Turkeys
- *WL9 Black-footed ferret habitat
- WL10 Riparian habitat

Special Designations (map 21)

- *SD1 Pterodactyl Track (natural history)
- *SD2 Red Wall ACEC (recreation)
- SD3 Salt Creek ACEC (soil, water, and air)
- *SD4 Jackson Canyon ACEC (wildlife)
- *SD5 Muddy Mountain EEA (recreation)
- SD6 Casper Sand Dunes (soil, water, and air)
- SD6 Natural Landmarks

Land Use Decisions

Cultural Resources

*C1: Spanish Diggings (48PL48)

No surface development will be permitted on the Spanish Diggings prehistoric quarry (520 acres).

*C2: Oregon Trail

Sites along the Oregon National Historic Trail and the Mormon Pioneer National Historic Trail (called the Oregon-Mormon trail in this document) will be managed so as to foster, promote, and protect from adverse impacts its significant cultural, scientific, and recreational values, as outlined in the National Park Service's *Oregon Trail Comprehensive Management Plan*. Therefore, no surface development would be allowed on the following sites, and the BLM will reassess the need to include other sites as they may be identified and to write management plans for sites that are potentially eligible for the National Register of Historic Places (955 acres). The sites on the Oregon-Mormon Trail in the following list marked with an asterisk will be nominated to the National Register (829 acres).

*Fort Laramie A, T26N, R64W, Sec. 35, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, and $\frac{1}{4}$ mile of either side of the trail through lots 6, 7, 8, and the W $\frac{1}{2}$ SE $\frac{1}{4}$.

*Fort Laramie B, T26N, R64W, Sec. 27, Sw $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$.

*Old Bedlam, T26N, R64W, Sec. 17, SW $\frac{1}{4}$ SW $\frac{1}{4}$.

*"Prospect" (Ryan) Hill (HS-WY-060-25), T31N, R83W: Sec. 8, SE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$; Sec. 17, NW $\frac{1}{4}$; Sec. 18, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$.

"Horse Creek", T30N, R85W, Sec. 15, E $\frac{1}{2}$ NW $\frac{1}{4}$.

Emigrant Gap, T33N, R81W: Sec. 10, SW $\frac{1}{4}$ NE $\frac{1}{4}$.

Bessemer Bend, T32N, R81W, Sec. 3 (about 3 acres).

*Platte Island, T34N, R77W, Sec. 31, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$.

*Sergeant Custard, T33N, R80W, Sec. 15, SW $\frac{1}{4}$ NW $\frac{1}{4}$.

*Glade Draw, T26N, R65W, Sec. 23, E $\frac{1}{2}$ E $\frac{1}{2}$ NE $\frac{1}{4}$.

*C3 Bozeman Trail

No surface development will be permitted on the following parcels along the Bozeman Trail in Converse County: (1,030 acres)

T. 40 N., R. 75 W.: Sec. 24, W $\frac{1}{2}$ SE $\frac{1}{4}$; Sec. 25, NE $\frac{1}{4}$

T. 40 N., R. 74 W.: Sec. 31, W $\frac{1}{2}$ NW $\frac{1}{4}$

T. 38 N., R. 74 W.: Sec. 2, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$.

T. 39 N., R. 74 W.: Sec. 34, NE $\frac{1}{4}$, E $\frac{1}{2}$ E $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$; Sec. 35, SW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$

T. 36 N., R. 74 W.: Sec. 22, E $\frac{1}{2}$ E $\frac{1}{2}$ NE $\frac{1}{4}$.

Each trail segment in C2 and C3 has been individually evaluated according to the "Guidelines for the evaluation of Historical Wagon Trails" of the Casper District and Wyoming State Office, BLM. trail segments that may be located would be protected until their significance is evaluated.

C4: Establishment of Data Base

A data base will be developed for Natrona, Platte, and Goshen counties using a predictive model for indentifying areas of high, medium, and low probability for the presence of cultural resources. Continued Class III inventory would probably be required only for high and medium probability areas.

*C5: Protection of Cultural Sites

Surface development will not be permitted on the following sites, and they will be assessed for stabilization and management needs (120 acres).

48NA227

48NA940

48NA84

Rock Cairn Trail (South Big Horn Mountains)

48NA368, Notches Dome Archeological District, (1,600 acres). Cultural sites within the district that have been or may be nominated to the National Register will be protected so that surface development will not affect those sites.

Surface development proposals within the Notches Dome Archeological District will require an on-site Class III inventory before implementation. This requirements would be voided if the BLM completes a Class III inventory for all land within the archeological district.

Production and development of oil and gas will be the priority within the KGS unless a cultural site is of National Register quality. In that case, the cultural site will be protected. Proposals in the rest of the district would be evaluated case by case.

Energy and Minerals

M1: Oil and Gas

BLM-administered lands will remain open to oil and gas leasing and exploration subject to the following provisions:

Oil and gas leasing will be subject to the constraints in appendix C, and development will be subject to the descriptions contained in appendix B. Mitigating measures prescribed in the Platte River Oil and gas EA and the South Big Horn oil and gas EA will apply case by case.

No leasing will occur within Naval Petroleum Reserve No. 3. Lands within 1 mile of this reserve are under restricted oil and gas leasing.

The following tracts will not be leased for oil and gas.

T.31N., R. 83 W.: Section 25, W $\frac{1}{2}$ NW $\frac{1}{4}$; Section 26, E $\frac{1}{2}$ E $\frac{1}{2}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{4}$. This area is characterized by steep slopes, highly erosive soil, and very sparse vegetation.

T.39N., R80 W.: Section 20, S $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$; Section 21, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$; Section 28, NW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$. These parcels are located in the Castle Creek sensitive drainage. Slopes are very steep and soils are highly erosive.

T. 40 N., R. 77 W.: Section 15, S $\frac{1}{2}$ SW $\frac{1}{4}$; Section 22, E $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$. These parcels are in a timbered drainage. Slopes are in excess of 25% and soils are very erosive.

M2: Coal

Federal coal land, as identified in the Converse County Coal Amendment (USDI, BLM 1983a) can be considered for further leasing through the competitive leasing program, emergency leasing, lease modifications, or exchanges (see appendix H).

The coal plan amendment completed by the Forest Service for land within the Thunder Basin National Grassland (TBNG) boundary (USDA, FS 1983) will serve as the basis for coal planning related to coal lands in the TBNG that are acceptable for coal development and available for further consideration for coal leasing. The BLM will apply the findings of the coal screening process contained in that plan amendment with regard to federal coal within the TBNG, as defined on the Location map in appendix B of that plan amendment. Leasing stipulations defined in appendix E of the plan amendment will be applied as necessary. (See appendix H of this document, which contains a summary of the Forest Service document.)

Coal leasing may be deferred in known geologic structures (KGSs) where coal development would interfere with oil and gas operations and the economic recovery of the existing oil and gas resource, except where it can be shown that economic recovery of oil and gas, and oil and gas operations, have been or will be completed before coal mining operations would begin. Proposals will be evaluated case by case, and coal mining and oil and gas operations would be allowed where conflicts can be avoided or mitigated.

All federal coal lands with mining claims are acceptable for coal development and for further consideration for existing leasing subject to valid existing rights.

Federal coal lands within the Orpha Stock Trail Driveway are acceptable for further consideration for coal leasing or exchange, subject to stipulations and mitigation requirements that would resolve any conflicts, unless the withdrawal is revoked.

All federal coal lands overlying shallow aquifers, including those within the Fort Union and Wasatch aquifers, are acceptable for further consideration for coal leasing.

M3: Salable Minerals

Mineral materials such as sand and gravel, moss rock, flagstone, and scoria will be available on demand for sale and for free use, subject to conditions and stipulations developed case by case so that efficient use can be made of the mineral resource. Materials in all low, moderate, and high potential areas are available except those in an area within ¼ mile of the North Platte River for its entire length in the PRRA. Sand and gravel operations authorized before August 1, 1984 on federal sand and gravel within the ¼-mile buffer would be continued.

Where possible, the routing of access roads will be made in conjunction with the surface owner.

M4: Locatable Minerals

All mineral estate, except in areas specifically withdrawn from mineral location, will remain open for prospecting for and development of locatable minerals. Development is subject to the regulations contained in 43 CFR 3809.

The following areas are withdrawn from mineral location.

- Public water reserves
- North Platte River protective withdrawal
- Leased or patented recreation and public purpose lands
- Muddy Mountain Recreation and Environmental Education Area
- Pathfinder Wildlife Refuge
- Naval Petroleum Reserve No. 3

Fire Management

FM1: Prescribed Burning

Full suppression will be maintained throughout the resource area as directed by the NFYP.

Prescribed burning will be implemented to manipulate vegetation on areas identified for treatment in the range, forestry and wildlife programs. Table B-1 defines prescription burning by RMU. Acreage figures may fluctuate pending a refinement of field surveys.

FM2: Heavy Equipment Use on Historic Trails

Heavy equipment will not be used to construct firelines in areas containing wagon ruts of the Oregon and Bozeman trails. Cultural resource specialists or area resource specialists will be consulted for locations of identified wagon ruts before the use of or anticipated use of heavy equipment. Exceptions may be permitted for the protection of human life.

Heavy equipment will not generally be used to construct firelines in elk critical winter range. The PRRA wildlife biologist will be consulted when fires threaten elk critical winter range. If heavy equipment is used, rehabilitation work on lines will begin immediately after the fire is declared out.

FM3: Fire Suppression in Bald Eagle Roost Areas

To the extent possible, trees will not be cut during fire suppression in bald eagle roost areas or within 200 yards of the roosts on Casper Mountain (Jackson Canyon and Little Red Creek) and on Pine Mountain. Exceptions will be permitted when necessary to control fires that threaten human life or private property. The PRRA wildlife biologist will be consulted when fires threaten the eagle roost areas.

Forest Management

F1: Forest Management Activity Plans

A detailed timber management activity plan would be developed for 17 areas (13,590 acres). Primary management will be directed at ponderosa pine and lodgepole pine composition.

Nine forest areas would be evaluated, and timber would be harvested from 1985 to 1990 in these areas: Esterbrook, Hartville-Sunrise, Negro Hill, Banner Mountain, Coal Mountain, Bessemer Mountain, Salt Canyon, Deer Creek, and Grave Springs. Eight forest areas would be evaluated and timber would be harvested from 1990 to 1995 in these areas: South Cottonwood-Notches Dome, Baldy Ridge, Rattlesnake Mountain, Badwater, Sioux Pass, Pine Mountain, Bates Creek-Sheep Creek, and Squaw Mountain.

Silvicultural practices would complement the timber harvesting and increase stand vigor. At least 50% of the lodgepole pine and ponderosa pine volume within stands would be cut by either selective cutting or clear cutting. Lodgepole pine seedling stands would be thinned through Christmas tree sales. Commercial lodgepole pine stands would be thinned by sales of posts and poles and fuelwood. Overmature trees

APPENDIX B

TABLE B-1
PROPOSED FIRE MANAGEMENT ACTIONS

Resource Management Unit	BLM Surface Acreage	Acreage of Priority Full Suppression Zones	Retain Full Suppression and Buffer Zones Acreage	Acreage of Limited Suppression	Acreage of Prescribed Burning	Acreage of Prescribed Burning in Ten Years
1. South Big Horns	380,770	17,000	63,770	300,000	7,500	2,500
2. Pine Mountain/Goldeneye	26,480	5,950	8,350	12,000	550	550
3. Oregon Trail	a					
4. Fremont Canyon	11,680	500	1,780	9,400	150	150
5. Salt Creek	90,900	23,000	34,500	33,400	350	350
6. Sand Dunes	29,820	300	5,600	23,920		
7. North Platte River	a	200				
8. Casper Mountain/Muddy Mountain	31,360	8,360	10,840	12,160	700	500
9. Bates Hole	109,440	1,900	7,540	100,000	7,000	3,500
10. Laramie Range-foothills	15,320	7,750	7,570			
11. Ross	27,560	2,560	17,200	7,800	300	
12. Muleshoe Flat/Richeau	51,890		33,970	17,920		
13. Table Mountain/Springer/Rawhide	3,015		3,015			
14. Platte River Resource Area	621,218	16,640	256,418	348,160	10,450	2,450
TOTAL	1,399,453	84,160	450,732	864,760	27,000	10,000
Percentage of resource area	100	6	32	62	2	1

a. Because this is a linear area, the acreage has been included with that of RMU 14.

infested by dwarf mistletoe would be cut and removed. Clearcutting of 3 to 5 acres would provide for natural regeneration. If the stand was not regenerating naturally in three years, artificial regeneration would be undertaken.

F2: Allowable Cut

The allowable cut would be about 6 MMBF through 1995. The annual cut would average about 600 mbf over the ten-year life of this plan. In the first five years, the cut would be about 750 mbf per year; for the next ten years it would be 500 mbf per year.

Little Red Creek, Jackson Canyon, and Muddy Mountain would have priority for timber harvest. The cut would be directed toward intensive pine beetle control. Secondary attention would be given to Deer Creek, Negro Hill, Grave Springs, and Baldy Ridge. Primary areas would be harvested by 1990, secondary areas by 1995.

F3: Harvest in Muddy Mountain EEA

Thinning would be done throughout the 1,200-acre Muddy Mountain EEA as needed. About 200 mbf per year would be harvested annually for five years. The cut would be directed toward beetle control. After the five-year period, the annual cut in the EEA would be about 25 mbf.

F4: Forest Demonstration Area

About 100 mbf of posts, poles, and fuelwood would be harvested annually from the forest demonstration area on Muddy Mountain through 1995 (approximately 400 acres).

Grazing Management

G1: Grazing Lease Administration

We would maintain 407 leases authorizing 205,071 AUMs of livestock forage on 1,442,753 acres of public land.

We would continue, and revise where necessary, the Bates Creek and Table Mountain AMPs. No new AMPs would be prepared. Leases would be revised as necessary to accommodate expected increases in AUMs from more intensive range management.

Range improvement projects that will be completed are defined in table B-2. Use supervision would be implemented according to table B-3. "C" allotments would be monitored.

G2: Weed and Pest Control

We will continue the existing weed and grasshopper control programs. Control of prairie dogs is subject to the conditions specified in WL-9.

APPENDIX B

TABLE B-2
LIVESTOCK GRAZING - PROPOSED MANAGEMENT

Number on Map ^a	Operator Name	Operator Number	Existing Livestock AUMs	Implement AMP	Increase in Livestock AUMs	Acreage of Brush Control	Project Development			
							Number of Reservoirs	Number of Wells	Number of Springs	Miles of Fence
1	Aetna ^b	6280	5,466	*	+130	200	1			1.00
2	Bates Creek ^b	6031	3,233	*	+125	750				1.00
3	Bentley ^b	6033	485		+ 54		3			4.00
4	Bonar	6047	625		+ 40			1		
5	Britain	6057	388		+ 50	75	2			1.25
6	Burke Sheep	6066	5,826		+ 12	100				2.50
7	Carlson, A.L.	6094	2,289		+152	200	5			6.00
8	Cheney ^b	6100	785		+ 17	160	2		1	2.00
9	Clear Creek	6107	5,819		+420	1,000	10		10	2.50
10	Cloud Creek ^b	6111	1,371		+ 26					5.50
11	Coffman ^b	6115	9,978		+700	100	20		5	18.00
12	Cummings	6423	1,455		+195	600	2			0.50
13	Deer Creek	6071	749		+ 86	360	2			1.00
14	Elkhorn	6179	8,486		+849	600	15		6	5.00
15	Garrett ^b	6213	1,928		+215	200	5		1	4.50
16	Howard	6184	3,009		+340	1,100	8		2	3.50
17	Irvine Brothers	6300	7,465		+305	800	13		4	
18	Irvine Ranches	6302	5,807		+550	1,000	10			
19	Marton ^b	6308	3,017		+453	1,500	6		3	4.75
20	McGuire, F.	6394	513		+ 77	600		1		

APPENDIX B

LIVESTOCK GRAZING - PROPOSED MANAGEMENT (continued)

Num- ber on Map ^a	Operator Name	Oper- ator Number	Existing Livestock AUMs	Implement AMP	Increase in Livestock AUMs	Project Development			
						Acreage of Brush Control	Number of Reser- voirs	Number of Wells	Miles of Fence
21	Miles	6413	4,238		-0-				
22	Burns	6416	1,260		+154	730	3	4	0.25
23	Mills	6422	2,238		+175	400	1	1	6.75
24	Rattlesnake	6015	7,163		+208	780	4	3	3.00
25	Rimrock	6535	439		+ 78	400			2.00
26	Robinet, V.	6539	2,804		+ 54		1	3	
27	Schmitt ^b	6556	270		+ 40			1	
28	Shamrock	6563	1,092		+ 58	400			
29	Shepperson, K.	6465	2,049		+101			2	1.50
30	Squaw Mountain	6270	1,082		+ 53			2	4.00
31	Steinle ^b	6602	412		+ 61			1	2
32	Stevenson and sons ^b	6011	4,234		+290	650		4	
33	Strohecker	6609	828		+ 82	870	2	1	1.00
34	Sullivan	6612	1,757		+ 37	400	1		3.00
35	Teapot	6622	2,040		+100	1,000			1.00
36	Willow Creek ^b	6674	4,315		+ 43	200		3	
37	Wollen	6311	1,028		+ 68	300			
38	Allemand, R.	6002	1,754		+101			2	
39	Antelope Springs	6010	3,189		+185	800			4.25
40	Body, A.	6040	333		+100	60			0.50
41	Body, R.	6042	307		-0-				
50	Collins, J.	6081	982		-0-		1		1
53	Fenton	6190	542		+ 98	800			pipeline
55	Gowin	6219	651		+ 39	300		1	

LIVESTOCK GRAZING - PROPOSED MANAGEMENT
(continued)

Num- ber on Map ^a	Operator Name	Oper- ator Number	Existing Livestock AUMs	Implement AMP	Increase in Livestock AUMs	Project Development			
						Acreage of Brush Control	Number of Reser- voirs	Number of Wells	Miles of Fence
60	Henry	6269	1,201		+ 79	1,000	1		2.75
61	Holman	6274	997		0				0.50
62	Hornbuckle	6018	1,496		+ 74	800	1		
68	M&D	6402	1,518		+142		6		
77	Pine Mountain	6493	641		+ 34		2		
82	Scott, Dr.		580		+ 15		1	1	
84	Shepperson Ranch		1,026		+ 74	600	2		1.50
86	Smith Sheep		1,518		+ 82	120		1	

NOTE: Numbers 21, 41 through 49, 51, 52, 54, 56 through 59, 63 through 67, 69 through 76, 78 through 81, 83, and 85 are not shown because no projects are planned for these allotments.

- a. Map refers to map 9, Volume 2, draft RMP/EIS.
- b. Action would be initiated on these allotments within the first ten years. Action would be initiated on other allotments as time, personnel, and funding permit.

TABLE B-3
RANGE MANAGEMENT PRESCRIPTIONS IN THE PLATTE RIVER RESOURCE AREA

Num- ber on Map	Operator		Allotment	Number	Use Supervision High-Moderate-Low	Actual Use (Rancher)	Trend Transects	Range Site Mapping	Wildlife or Watershed Studies
	Name	Number							
1	Aetna Insurance Company	6280	Buffalo Creek	1	H	X	X	X	
2	Bates Creek Cattle Company	6031	Two Bar	2	L	X			
3	Bentley ^b	6033	Bates Creek	3	H	X	X		
4	Bonar	6047	Posvar	4	H	X	X		X
5	Britain	6057	Bonar	5	L	X			
			S. Cave Gulch	6	H	X			
			Powder River Draw	7	H	X			
			Sand Draw	7	M	X			
			Waltman	8	M	X			
6	Burke Sheep Com- pany	6066	Burke	9	M	X			
			Cheever Flat	10	L	X			
			Merino A.T. ^a	1001	H	X			
			Bucknum A.T	1002	H	X			
			Hemingway	11	M	X			
7	Carlson, A.L.	6094	Hiland	12	H	X			
			Railroad	13	H	X			
			Camel's Hump	14	H	X			
			Ellis Mountain	15	H	X			
8	Cheney Livestock ^b	6100	Cheney	16	M	X			
			Muddy Mountain	17	H	X	X		X
9	Clear Creek Cattle Company	6107	Clear Creek	18	M	X			
			Kantrell-Todd	19	L	X			
			Matador	20	M	X			
10	Cloud Creek Sheep Company	6111	Cloud Creek	21	H	X			
			Fifty-mile Flat A.T.	22	H	X			
			Pine Creek	23	M	X			
			Fifty-mile Flat	1003	H	X			
11	Coffman Ranch Company	6115	Coffman	24	H	X			
			Spring Creek	25	H	X			
			Powder River	26	H	X			
			Beck Place	27	H	X			
12	Cummings	6423	Cummings	28	H	X			
13	Deer Creek Ranch	6071	Keg Spring Draw	29	H	X			
			South Hiland	30	H	X			
14	Elkhorn Land & Livestock	6179	Elkhorn	31	H	X			
15	Garrett Ranch ^b	6213	Garrett	32	H	X	X		X
16	Howard Farms	6184	Baskett	33	H	X			
			Ellis Trust	34	H	X			
			Eagle Creek	35	H	X			
			Brian	36	M	X			
17	Irvine Brothers	6300	Irvine Brothers	37	H	X			
			Cottonwood A.T.	1004	H	X			
			Lester Trail A.T.	1005	H	X			
			East Trail A.T.	1006	H	X			
			West Trail A.T.	1007	H	X			

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RANGE MANAGEMENT PRESCRIPTIONS (continued)

Number on Map	Operator		Allotment		Use Supervision		Actual Use (Rancher)	Trend Transects	Range Site Mapping	Wildlife or Watershed Studies
	Name	Number	Name	Number	High-Moderate-Low					
18	Irvine Ranches	6302	Davis	38	H		X			
19	Marton Brothers ^b	6308	Begley	39	H					
20	McGuire, Fred	6394	Marton	40	H		X			X
21	Miles Land & Livestock ^b	6413	Cooney Hills	41	M					
22	Burns Land & Cattle	6416	Ice Cave Mountain	42	M					
23	Mills Livestock	6422	Alcova	43	H					X
			Ervey Basin	44	H					
			Poison Spider	45	L					
			Bessemer Mountain	46	H					
			Lone Tree	47	H					
			Spruce Creek	48	L					
			Emigrant Gap A.T.	1501	H					
24	Rattlesnake Grazing	6015	Rattlesnake	49	H					
25	Rimrock Livestock	6535	Emigrant Gap	50	L					
26	Robinet, V.	6539	Deer Creek	51	H					
27	Schmitt ^b	6556	Stone Ranch	52	H					
28	Shamrock	6563	Potter	53	H					
			Little Red Creek	54	H		X			X
			Cloud Creek	55	H					
			Castle Creek	56	H					
			3T	57	H					
			Mountain West	58	M					
			Mountain East	59	M					
29	Shepperson, K.R.	6465	South Castle Creek	60	M					
30	Squaw Mountain	6270	Squaw Mountain	61	M					
31	Steinle ^b	6602	Steinle	62	H					
32	Stevenson & Sons ^b	6011	Pathfinder	63	H		X			X
33	Strohecker	6609	Coyote Creek	64	H					
			Strohecker	65	H					
34	Sullivan	6612	Sullivan	66	H					
			Red Fork	67	M					
			West Trail A.T.	1007	H					
35	Teapot Ranch Company	6622	Teapot	68	M					
36	Willow Creek Company	6674	Willow Creek	69	H		X		X	X
37	Wollen	6311	Wollen	70	H					
38	Allemand, R.	6002	Allemand	71	M					
39	Antelope Springs	6010	Antelope Springs	72	M					
			Lone Bear	73	M					
40	Body, A.	6040	Elk Creek	74	M					
41	Body, R.	6042	Texas Creek	75	H					
42	Braunschweig	6051	Body	76	H					
			Braunschweig	77	L					

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RANGE MANAGEMENT PRESCRIPTIONS (continued)

Num- ber on Map	Operator		Allotment		Use Supervision High-Moderate-Low	Actual Use (Rancher)	Trend Transects	Range Site Mapping	Wildlife or Watershed Studies
	Name	Number	Name	Number					
43	Bremer	6713	North Platte	78	M	X			
44	Brewer b	6053	Brewer	79	M	X			
			Goldeneye	80	H	X			
			Tie Bridge Gulch	81	M	X			
45	Brooks, B.B.	6038	Ormeby	82	L	X			
			Smith Creek	83	L	X			
46	Carlson Ranch	6135	Pine Creek	84	L	X			
	Company		Waltman	8	L	X			
47	Clemons	6152	Clemons	85	M	X			
48	Coates	6112	Coates	86	M	X			
49	Cole Creek Sheep	6122	Cole Creek	87	M	X			
	Company								
50	Collins, J.	6081	Granite Ridge	88	M	X			
51	Dodds	6166	Dodds	89	L	X			
52	Ellis Sheep	6185	Big	90	M	X			
	Company		Cleghorn	91	M	X			
			Foster Draw	92	M	X			
			Middle Fork	93	M	X			
			Donlin	94	M	X			
			Bucknum A.T.	1002	H	X			
53	Fenton	6190	Fenton	95	M	X			
			Waltman	8	L	X			
54	Forgey	6198	Forgey	96	L	X			
55	Gowin	6219	Paul Place	97	M	X			
			North Casper Creek	98	M	X			
			Buchanan	99	L	X			
56	Harlan, C.	6691	Merino A.T.	1001	H	X			
			Cloud Creek	100	M	X			
			Powder River	101	M	X			
			Harlan	102	M	X			
			Trail	103	M	X			
57	Harlan, R.	6633	Broken Horn	104	M	X			
58	Harvey, J.	6260	Spring Canyon	105	L	X			
59	Haygood & Martin	6263	Corral Creek	106	M	X			
			Houghton	107	L	X			
60	Henry	6269	Henry	108	L	X			
			North Fork	109	M	X			
61	Holman	6274	Holman	110	H	X			
			Alkali	111	H	X			
			First Water	112	H	X			
62	Hornbuckle	6018	Hornbuckle	113	L	X			
			55 Ranch	114	L	X			
			North Fork	109	M	X			
63	Irvine, Van	6306	Antelope Hills	115	M	X			

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RANGE MANAGEMENT PRESCRIPTIONS (continued)

Num- ber on Map	Operator		Allotment		Use		Actual Use (Rancher)	Trend Transects	Range Site Mapping	Wildlife or Watershed Studies
	Name	Number	Name	Number	High-Moderate-Low	Supervision				
64	Jarrard	6314	Lone Tree Gulch Flying Diamond Jarrard	116 117 118	M M H		X X X			
65	Johnson, Bill	6315	Smokey Gap A.T. Togy Mound	1008 119	H L		X X			X
66	Johnson, Jack	6317	Table Mountain 1 ^a Johnson	120 121	H H		X X			X
67	Lorenz ^b	6736	Table Mountain 2	122	H		X			
68	M & D	6402	M & D	123	M		X			
69	Manning	6521	Manning	124	M		X			
70	Marshall	6380	Ward Place	125	M		X			
71	McGuire, B., Sr.	6032	Lower Muleshoe Upper Muleshoe Slate Creek	126 127 128	H M M		X X X			
72	Burns Land & Cattle	6000	Garfield Peak	129	H		X			
73	Miller, D.	6415	Miller	130	M		X			
74	Milne, J.	6425	Sheep Creek	131	M		X			
75	Milne, G.	6427	Wallace Creek	132	M		X			
76	Moore, Tye	6442	Clarkson Hill	133	M		X			
77	Pine Mountain Ranch	6493	Pine Mountain	134	M		X			
78	Robinet, Guy	6026	Barker	135	M		X			
79	Salt Creek Ranch	6552	Cottonwood Creek Bothwell Creek Salt Creek	136 137 138	H H H		X X X			
80	Sanford	6666	TTT-Scott's Place	139	H		X			
81	Schnoor	6558	Schnoor	140	H		X			
82	Scott	6560	Bessemer Bend Jackson Canyon	141 142	L M		X X			
83	Sedman ^b	6704	Table Mountain 3	143	H		X			
84	Shepperson Ranch	6570	Castle Creek	144	H		X			
85	Skyline Ranches	6075	Diamond Ring Midwest Smith	145 146 147	H H M		X X X			X
86	Smith Sheep Company	6586	Okie Trail Staple Three	148 149	M M		X X			
87	Spratt & Sons	6739								
88	Staple 3 Sheep Company	6597								
89	Thirty-one Bar	6062	Thirty-one Bar	150	M		X			
90	Valentine & Sons	6638	Valentine Big Muddy	151 152	M L		X X			

RANGE MANAGEMENT PRESCRIPTIONS (continued)

Num- ber on Map	Operator		Allotment		Use		Actual Use (Rancher)	Trend Transsects	Range Site Mapping	Wildlife or Watershed Studies
	Name	Number	Name	Number	High-Moderate-Low					
91	V.I. Sheep Company	6642	Edgerton Smokey Gap Dead Horse Eagle Creek Barnum Road	153 154 155 156 157	H H H M M		X X X X X			
92	Weidt	6353	Weidt	159	M		X			
93	Zavorka ^b	6685	Bump-Sullivan	160	H		X			
94	Seven L Live- stock Company	6562	Seven L	161	M		X			

a. "A. T." indicates "after trail"; that is, grazing is permitted in the area of a stock driveway at other times than during trailing.

b. Priority allotment. Action will be initiated in the next ten years.

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G3: Stock Driveways

Stock driveways will be utilized to the fullest extent possible, and standards will be developed for livestock use other than trailing. Where there is an established stock driveway and it is not being used for trailing, action will be taken to cancel the stock driveway withdrawal and to fence it into adjacent allotments or to issue leases to adjacent BLM lessees. Where stock driveways are only slightly used for trailing and are not fenced, the BLM will take action to lease the driveway to the grazing lessee whose lease adjoins the area. AUMs will be reserved for trailing. Where there is forage left after the trailing period on fenced stock driveways, these areas could be leased for supplemental use on a year-to-year basis. All other driveways would be used exclusively for trailing livestock.

Lands

L1: Land Disposition

Recreation and Public Purposes Act

A total of 1,700 acres has been specifically identified for lease or disposal under the R&PP Act as follows: Casper Mountain, 480 acres; Glendo Reservoir, 92 acres; Gray Rocks Reservoir, 278 acres; Torrington tract, 120 acres; Natrona County School District site, 40 acres; Esterbrook townsite, 130 acres; and the Converse County Park, 660 acres. These lands have been so identified because of their location within high use recreation areas or near to communities.

About 470 acres, including 200 acres within Casper's projected growth boundary and 275 acres near the Gray Rocks Reservoir, have been identified for disposal under the R&PP Act, but if no R&PP lease or disposal is made by 1987, these lands will be disposed of first by exchange if possible, or by public sale.

Other public lands in the resource area can be considered case by case when a definite need for the land is identified, the requirements of the R&PP Act can be met, and the proposal is in conformance with this and other local land use plans.

Sanitary landfilling is the most common method of solid waste disposal in the PRRA. Public lands are frequently leased for landfills under the R&PP Act. The following areas have been identified as problem areas, and future potential landfill sites may be considered: Arminto, Hiland, and Waltman; Badwater; Raderville; Powder River; Medicine Bow Highway (U.S. 487); Hartville-Sunrise; and Chugwater Creek. In these areas, either there is a problem such as indiscriminate or trespass dumping or the existing waste disposal facility is inadequate.

Exchanges

Exchanges are used to acquire nonfederal lands to enhance BLM management opportunities. The BLM would like to acquire land through exchange in the following seven selected areas: Muddy Mountain, the North Platte River, Table Mountain, Red Wall, South Big Horns, Rattlesnake Range, Ryan Hill (Oregon Trail), Alkali Slough (Oregon Trail). These areas are considered to have high recreation use or good potential for recreation development, or they contain important wildlife, cultural, scenic, natural, open space, or other resource values.

Public land tracts that are not critical to current management objectives would be disposed of to acquire land in these areas as exchange opportunities arise. Some lands have been identified for disposal to acquire specific private land tracts. The legal descriptions of specific exchanges are on file in the PRRA office in Casper.

Exchanges could be used to resolve some split estate problems. This would be consistent with the policy of the Director of the BLM on mineral exchanges, as defined in BLM Instruction Memorandum WO 84-81. A case-by-case analysis is essential in mineral exchanges; however, the following options are available:

Private surface could be acquired on one parcel and federal surface conveyed on another. This would eliminate the split estate situation on the one parcel, but create a split estate elsewhere. Only in special circumstances would this be beneficial to the public (policy of the Director, BLM).

Private surface could be acquired on one parcel and federal surface and minerals conveyed on another. This would eliminate the split estate situation, but might result in value disparities.

Private minerals also can be exchanged for federal minerals, or federal minerals in one area can be exchanged for federal minerals in another, or federal mineral lease rights in one area can be exchanged for lease rights in another area (as when lease rights to minerals beneath alluvial valley floors are exchanged).

Disposal by Other Means

About 102,700 acres are tentatively identified for disposal. This includes land that could be available for sale and exchange. About 23,000 acres of the total within RMUs 1 through 13 could be used for exchange or public purpose uses.

Disposal for Purposes of Agricultural Development

Lease or disposal of public land will be permitted in the PRRA for agricultural purposes if the lands are suitable for agricultural development. Lands in the Buffalo Creek area would be available, but only by lease. BLM-administered surface adjacent to big game winter ranges will not be used for agricultural purposes.

*L2: Withdrawals

Protective withdrawals would be established in four areas. The objective of such withdrawals is to protect and preserve important resource values. Some limitations apply, such as completing intensive mineral investigations. The areas where withdrawals will be recommended are Pterodactyl Tracks, Muddy Mountain EEA, Jackson Canyon, and Table Mountain. About 7,200 acres in these four areas would be recommended for withdrawal. The Platte River protective withdrawal, which contains about 3,300 acres, would be continued. The Fremont Canyon C&MU classification (1,300 acres) would be terminated.

L3: Corridors

The Oregon Trail corridor and four existing corridors would be designated in accordance with 43 CFR 2806. Except for the

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new Oregon Trail location, each designation would include the same types of facilities that are present within the corridor.

The corridors are as follows:

Oregon Trail Road. This corridor would be 1 mile wide and at least 1 mile north of the Oregon Trail Road. All sizes of pipelines and power lines would be considered.

Poison Spider Road. This corridor would be ½ mile wide, ¼ mile on each side of the road.

U.S. Highway 20-26. This corridor would be 3 miles wide, 1 ½ miles on each side of the highway.

Wyoming Highway 259/U.S. 87. This corridor would be 2 miles wide between Casper and Ormsby Road, 5 miles wide between Ormsby Road and Midwest, and 1 mile wide between Midwest and the northern boundaries of the resource area.

Wyoming Highway 387. This corridor would be 2 miles wide, 1 mile on each side of the highway.

Future corridor adjustments and new corridor designations would be made only when facility placement within an existing designated corridor was incompatible or unfeasible and when the environmental consequences could be adequately mitigated. Problems of technical compatibility between facilities and spacing of facilities in corridors would be solved case by case.

Restrictions on placement of rights-of-way would be as follows:

Rights-of-way on Pine Ridge would be prohibited.

Placement of rights-of-way would be restricted on Highway 220 from Bessemer Mountain to Alcova; the newly constructed segments of I-25 in Townships 37, 38, 39, and 40 North, Ranges 79 and 80 West; Rattlesnake Range; Red Wall; Muddy Mountain elk winter range; within 1 mile of the North Platte River; Jackson Canyon ACEC, and Squaw Mountain.

Rights-of-way in the Red Wall and South Big Horns areas would be prohibited in the area north and west of the Badwater, Lost Cabin, and Buffalo Creek roads, and the Red Wall.

Most of the South Big Horns area is leased for oil and gas, and drilling could occur in the future. If production is achieved, rights-of-way will be allowed only in accordance with an approved oil field development plan. Rights-of-way needed to transport products out of the area will parallel county roads except for the Big Horn Mountains Road, Okie Trail, and Buffalo Creek county roads.

L4: Access

We would pursue acquisition of 17 easements or cooperative agreements for access over about 38 miles of private lands, as listed below:

Corral Creek, 3½ miles, T31N, R79W, Sec. 9, SE¼SE¼; Sec. 10, SW¼NW¼, W¼SW¼; Sec. 14, SW¼SW¼; Sec. 15, S¼SW¼, SE¼; Sec. 16, E¼E½; Sec. 23, NW¼NW¼.

Bates Creek Reservoir, 3 miles, T29N, R78W, Sec. 7, S¼SW¼; Sec. 8, S¼SW¼; Sec. 16, N¼N½; Sec. 17, N¼NE¼, NE¼NW¼; T29N, R79W, Sec. 12, SE¼SE¼; Sec. 13, N¼NE¼, SE¼NW¼, N¼SW¼, SW¼SW¼.

Kerfoot Creek (foot access only), ½ mile, T29N, R79W, Sec. 2, NE¼NW¼; T30N, R79W, Sec. 26, SE¼NW¼; Sec. 35, SE¼SW¼.

Alkali Trail, ¾ mile, T39N, R84W, Sec. 23, SE¼NE¼; T38N, R85W, Sec. 16, NW¼NE¼, NE¼NW¼.

Horse Ranch, 2½ miles, T37N, R80W, Sec. 10, SW¼SE¼; Sec. 15, S¼NW¼; Sec. 16, SE¼NE¼, N¼SE¼, SW¼SE¼; T37N, R81W, Sec. 16, E¼NW¼, SW¼NW¼; T38N, R79W, Sec. 27, SW¼SW¼; Sec. 33, N¼NE¼; Sec. 34, NW¼NW¼.

Hitt, 6½ miles, T37N, R82W, Sec. 2, NE¼SE¼; T38N, R82W, Sec. 10, S¼SW¼; Sec. 15, N¼NW¼; Sec. 16, N¼NE¼, SW¼NE¼, E¼SW¼, SW¼SW¼, NW¼SE¼; Sec. 20, SE¼NE¼, N¼SE¼, SE¼SW¼; Sec. 29, NW¼, E¼SW¼; T37N, R83W, Sec. 5, SE¼NW¼; Sec. 8, SW¼NE¼, E¼SE¼; Sec. 17, E¼E½; Sec. 20, NE¼, W¼SE¼.

Big Sulphur, 5¾ miles, T39N, R82W, Sec. 30, S¼NW¼, NW¼SW¼; T38N, R83W, Sec. 3, E¼SW¼, SW¼SW¼, N¼SE¼; Sec. 4, N¼SW¼, SE¼SW¼, S¼SE¼; Sec. 5, E¼SE¼; T39N, R83W, Sec. 25, SE¼SW¼, N¼SE¼, SW¼SE¼; Sec. 36, N¼NW¼; T39N, R84W, Sec. 1, SW¼SW¼; Sec. 2, N¼SW¼, W¼SE¼, SE¼SE¼; Sec. 12, NW¼NW¼, SE¼NW¼, NE¼SW¼.

Canyon Creek, 2¼ miles, T33N, R88W, Sec. 19, E¼SW¼; T33N, R89W, Sec. 26, SW¼NE¼, W¼SE¼, SE¼SE¼; Sec. 36, N¼N½.

North Platte River, Parcel No. 1, 2 miles, T34N, R76W, Sec. 31, N¼SE¼; Sec. 32, N¼S½; Sec. 33, N¼SW¼.

North Platte River, Parcel No. 2, 1¼ miles, T34N, R74W, Sec. 33, SE¼SW¼, E¼SE¼, SW¼SE¼; Sec. 34, N¼S½.

North Platte River, Parcel No. 3, ¼ mile, T33N, R74W, Sec. 3, E¼SE¼.

North Platte River, Parcel No. 4, 1½ miles, T31N, R71W, Sec. 3, W¼W½; Sec. 4, SE¼SE¼; Sec. 9, NE¼NE¼; T32N, R71W, Sec. 34, SW¼SW¼.

North Platte River, Parcel No. 5, 3¼ miles, T31N, R70W, Sec. 18, SE¼NE¼, E¼SE¼; Sec. 19, E¼NE¼, SW¼NE¼, W¼S½, SE¼NW¼; T31N, R71W, Sec. 23, W¼NE¼, SE¼NE¼, NE¼SE¼; Sec. 24, N¼N½, SW¼NW¼, NW¼SW¼. North Platte River, Parcel No. 6, ½ mile, T30N, R68W, Sec. 7, N¼NW¼ (Parcel No. 7 already has access).

North Platte River, Parcel No. 8, 1½ miles, T26N, R65W, Sec. 10, SE¼NE¼; Sec. 11, SW¼NW¼, W¼SW¼; Sec. 14, W¼W½.

North Platte River, Parcel No. 9, 2 miles, T26N, R64W, Sec. 7, SE¼SW¼, SW¼SE¼; Sec. 17, N¼SW¼, SE¼SW¼; Sec. 18, W¼NE¼, NE¼NW¼, N¼SE¼; Sec. 20, NW¼NE¼.

Upper Laramie River, 1¼ miles, T23N, R70W, Sec. 3, S¼S½; Sec. 4, S¼SE¼; Sec. 10, NE¼NE¼ (Parcel No. 10 already has access).

Specific locations could be changed to accommodate variations in negotiations or construction problems.

Recreation Management

*R1: Recreation Area Management Plans (RAMP)

We would continue to implement completed RAMPs according to the management objectives and decisions defined for the following areas.

*Muddy Mountain

The Muddy Mountain activity plan, which was completed in 1977, provides planning decisions for preserving the natural character and wildlife habitat of 12,000 acres of BLM land in areas identified as the Muddy Mountain EEA, North Rim, Corral Creek Canyon, West Rim, Baldy Knob, and the East

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End. The plan sets forth actions necessary to manage public use so that resource damage and conflicts are minimized. Uses included are recreation, public access, visitor control and environmental protection, information, interpretation, special recreation use permits, wildlife, timber, range, minerals, lands, and fire management. The EEA area would be recommended for withdrawal from the operation of the 1872 mining law.

***Goldeneye Wildlife and Recreation Area**

The Goldeneye plan provides for the cooperative management of 733 acres of BLM land, 280 acres of state land, and 140 acres of private land, or a total area of 1,153 acres. Included in the total acreage is a 488-acre reservoir. The management program sets forth actions for recreation (hunting, fishing, picnicking), wildlife (trout fishery, bird habitat), livestock grazing, mineral activities, and lands actions. The plan permits no surface development within the boundary of the recreation area unless the development would facilitate recreational use or enhance wildlife habitat.

Middle Fork Management Area

The Middle Fork Management area lies in Natrona County (21,600 acres), and Johnson County (57,560 acres). The portion in Johnson County is in the Buffalo Resource Area. A recreation plan has been implemented in the Johnson County portion of the area. The PRRA will cooperate with the Buffalo Resource Area in managing the Natrona County portion of the Middle Fork Management Area. The plan provides for a high quality multiple activity recreation area for public enjoyment while protecting high value resources, assuring permanent access, and maintaining other compatible resource uses. Emphasis in the PRRA-Buffalo cooperative management of the Natrona County portion will be on protection of wildlife habitat, access, and protection of cultural resources.

North Platte River

The North Platte River RAMP would provide for the management of 200 acres (9 parcels) of public land contiguous to the river between Alcova and Casper. Camping, fishing, boating, hunting, and limited ORV use would be included.

Field inventories would be conducted to monitor use by visitors and resource degradation. Boundary signs will be placed on public land, and hazards on the river will be identified. Before signs are placed on private surface, written agreements with landowners will be obtained.

To facilitate the management of the 200 acres included in the plan, surface development other than recreation facilities would not be allowed on the land listed below, some of which is adjacent to the area to be actively managed. The tracts would be protected from disposal.

Site F1: T34N, R76W, Sec. 31, SW $\frac{1}{4}$; site F2: T34N, R76W, Sec. 34, SE $\frac{1}{4}$ SE $\frac{1}{4}$; site F3: T33N, R74W, Sec. 2, SW $\frac{1}{4}$ SW $\frac{1}{4}$; site F4: T31N, R71W, Sec. 5, NE $\frac{1}{4}$ SE $\frac{1}{4}$; and site F5: T31N, R71W, Sec. 23, NE $\frac{1}{4}$ NW $\frac{1}{4}$.

Easements or land exchanges will be obtained to provide access after the RAMP is completed.

We will try to arrange cooperative agreements with Converse County and the Wyoming Highway Department so that parking facilities and boat launching and landing sites can be provided on bridge rights-of-way held by the county and the state.

Facilities would be developed on the Muddy Mountain and Goldeneye recreation areas as described in items 1 and 2 in table B-4. Facility development in areas 3 through 8 would be limited to support facilities necessary for the health and safety of people using the recreation sites. Monitoring and use supervision would be provided at all sites.

R2: Off-Road Vehicles

ORV designations for the Platte River Resource Area are defined in table B-5.

***R3: Environmental Education Areas**

Continued use for educational purposes will be permitted on the following tracts: T. 33 N., R. 80 W., Section 15, S $\frac{1}{2}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$; and T. 34 N., R. 78 W., Section 25, E $\frac{1}{2}$ NE $\frac{1}{4}$, Section 26, SE $\frac{1}{4}$ SW $\frac{1}{4}$. These tracts are available for R&PP use, and all but the tract in Section 25 may be considered for disposal after 1987.

***R4: Visual Resource Management**

We will apply the BLM's visual resource management system in the PRRA where required to mitigate impacts from surface development.

Soil, Water, and Air

SWA1: Watershed Plans

We would implement the Bates Hole watershed plan for southeastern Natrona County to identify sources of heavy sediment loads in the North Platte River. To date, Bolton Creek, Ledge Creek, Bear Creek, Washout Creek, Stinking Creek, and Big Red Creek have been identified as drainages of concern. We would determine the cause of the erosion (geologic or accelerated) and try to reduce or eliminate accelerated erosion. Any attempts to reduce heavy sediment loads will be based on cost-benefit analysis.

Short-term, intermediate, and long-term stream monitoring surveys (Level II) will be continued on the Stinking Creek, Elk Creek, Red Creek, Bear Creek, and Bolton Creek streams and drainages as defined in SWA 1.

The following listed sensitive drainages will be evaluated to determine the need for intensive management. The list reflects the order of priority. Intensive management may include such options as a watershed plan, implementing various protective measures, and placement of various structures as may be necessary.

Bates Creek
Washout Creek*
Ledge Creek*
Bear Creek*
Bolton Creek*
Stinking Creek*
Cloud Creek
Salt Creek**
Anderson Draw
Cave Gulch
Okie Draw
Teapot Creek**

TABLE B-4
EXISTING AND PROPOSED FACILITIES FOR RECREATION SITES
IN THE PLATTE RIVER RESOURCE AREA

Name	Existing Facilities	Proposed Improvements
1. Muddy Mountain Recreation Area - Natrona County	2 designated campgrounds 2 nature trails 1 interpretation ramada 2 water wells 2 vault latrines Access road Picnic tables	Dry use area Picnic tables Group camping area Vault latrines Snowmobile/cross-county ski trails
2. Goldeneye Wildlife and Recreation Area - Natrona County	Access road Parking area Vault latrine Boat ramp	Designated camping area Picnic ramada Picnic tables Shade trees
3. Trapper's Route Canoe Trail - Natrona County	1 vault latrine Trash cans Access roads Launching/landing areas Signs	Picnic tables Designated parking and camping areas Designated off-road vehicle access Trash cans Vault latrine Improved access Information signs Launching/landing areas
4. Oregon/Mormon Trail - Natrona, Converse, Platte, and Goshen counties	None, except for Bessemer Bend #5	Interpretation sites
5. Bessemer Bend Historic Site - Natrona County	Access road Parking area Historic interpretive ramada Vault latrine Trash cans	Picnic ramada Picnic tables Landing/launching area River access (vehicle) Shade trees
6. Camel Hump Campground - Natrona County	None	Vault latrine Designated parking and camping areas Picnic tables Signs
7. Grave Springs Campground - Natrona County	1 outhouse Trash cans Picnic tables	Vault latrine Picnic tables Designated parking and camping areas Signs
8. Buffalo Creek Campground - Natrona County	1 outhouse Trash cans	Vault latrine Picnic tables Designated parking and camping areas Improved fishing access Signs

TABLE B-5
ACRES FOR OFF-ROAD VEHICLE USE
IN DESIGNATED CLASSES

	Acres	Total Acres
I. Open for unlimited ORV use Poison Spider bentonite pit	200	200
II. Closed to all ORV use Muddy Mountain Environmental Education Area Trail sites along the Oregon Trail Road Trail sites along the Bozeman Trail	630 955 1,030	2,615
III. Open limited to ORV use as indicated: III A. ORVs must stay on designated roads and vehicle routes Muddy Mountain Recreation Area Goldeneye Wildlife and Recreation Area Sand Dunes northeast of Casper Jackson Canyon North Platte River from Casper to Alcova Red Wall	11,370 733 13,560 3,890 2,990 32,295	64,838
III B. ORVs must stay on existing roads and vehicle routes on public lands not listed in III A; however, temporary ORV use is allowed for performance of necessary tasks		1,331,676
Total acreage		1,399,453

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Castle Creek
Red Creek*
Little Red Creek*
Indian Creek
Headwaters of Wallace Creek
Buffalo Creek
Aspirin Creek
Alkali Creek
Corral Creek
Badwater Creek

Drainages followed by an asterisk will be included in the Bates Hole Watershed Plan; drainages followed by two asterisks will be included in the Salt Creek Drainage ACEC Management Plan.

A short-term surface water inventory and the long-term stream monitoring portions of the Level II survey will be continued throughout the resource area until a statistically reliable base of information is available, as follows:

Intermediate stream monitoring (short-term surface water inventory portion of the Level II survey) will be carried out as listed in table B-6.

Long-term stream monitoring stations (long-term stream monitoring portion of the Level II survey) will be established in cooperation with the Geological Survey, U.S. Department of the Interior. The streams to be monitored are listed in priority order in table B-6.

TABLE B-6
BLM SURFACE WATER MONITORING SITES

<u>Name of Site</u>	<u>Legal Description</u>
INTERMEDIATE MONITORING	
Sioux Creek	T40N, R89W, Sec. 33, SW1/4NE1/4
Alkali Creek	T37N, R89W, Sec. 5, NE1/4NW1/4
Badwater Creek	T39N, R88W, Sec. 22, NE1/4NE1/4
Badwater Creek	T39N, R88W, Sec. 29, SE1/4NW1/4
Red Creek	T38N, R87W, Sec. 19, SE1/4SW1/4
Dry Fork Badwater Creek	T39N, R88W, Sec. 33, NW1/4NE1/4
Aspirin Draw	T35N, R86W, Sec. 9, NW1/4NW1/4
Wallace Creek	T34N, R86W, Sec. 6, SE1/4NE1/4
South Fork Powder River	T35N, R85W, Sec. 4, NE1/4SW1/4
Horae Creek	T30N, R85W, Sec. 1, NW1/4NE1/4
Cottonwood Creek	T38N, R84W, Sec. 34, SW1/4SE1/4
Okie Draw	T37N, R84W, Sec. 8, SE1/4SW1/4
Cave Gulch	T37N, R84W, Sec. 29, SE1/4NW1/4
Alkali Creek	T39N, R83W, Sec. 4, NE1/4SW1/4
Iodian Creek	T38N, R83W, Sec. 34, NE1/4NW1/4
Anderson Draw	T38N, R83W, Sec. 34, SE1/4NW1/4
Cloud Creek	T39N, R82W, Sec. 23, NW1/4NW1/4
Boltoo Creek	T31N, R81W, Sec. 25, NE1/4NE1/4
Bear Creek	T30N, R81W, Sec. 25, NW1/4SE1/4
Wahout Creek	T30N, R82W, Sec. 1, SE1/4SW1/4
Ledge Creek	T30N, R82W, Sec. 15, NE1/4NW1/4
Little Red Creek	T31N, R80W, Sec. 9, NE1/4NW1/4
Big Red Creek	T31N, R80W, Sec. 16, SW1/4SE1/4
Corral Creek	T31N, R80W, Sec. 22, NW1/4SW1/4
Stinking Creek	T28N, R80W, Sec. 15, NE1/4NW1/4
Stinking Creek	T29N, R80W, Sec. 6, NW1/4SE1/4
Stinking Creek	T31N, R81W, Sec. 14, NW1/4SW1/4
Bates Creek	T30N, R79W, Sec. 29, NW1/4SE1/4

(continued)

BLM SURFACE WATER MONITORING SITES
(continued)

<u>Name of Site</u>	<u>Legal Description</u>
Bates Creek	T31N, R80W, Sec. 34, SW1/4SW1/4
Bates Creek	T31N, R81W, Sec. 11, NW1/4SE1/4
Elk Creek	T29N, R80W, Sec. 6, SW1/4NE1/4
Salt Creek	T40N, R79W, Sec. 24, NW1/4NW1/4
Salt Creek	T39N, R78W, Sec. 16, SW1/4SE1/4
Castle Creek	T39N, R79W, Sec. 14, SE1/4NW1/4
Meadow Creek	T42N, R78W, Sec. 19, SE1/4NW1/4
LONG-TERM MONITORING	
Priority 1	
North Platte River near Goose Egg	T32N, R81W, Sec. 22, SW1/4SW1/4
Powder River near Sussex	T43N, R79W, Sec. 13, SE1/4NW1/4
South Fork of Powder River near Kaycee	T43N, R81W, Sec. 13, NW1/4SW1/4
Salt Creek near Sussex	T42N, R79W, Sec. 8, NE1/4SE1/4
Stinking Creek near the Body Ranch	T29N, R80W, Sec. 18, NE1/4NE1/4
Priority 2	
Stinking Creek	T31N, R80W, Sec. 29, NE1/4SW1/4
Lawn Creek	T29N, R80W, Sec. 7, SE1/4SE1/4
Upper Bates Creek	T31N, R80W, Sec. 20, NW1/4NE1/4
Corral Creek	T31N, R80W, Sec. 17, SW1/4SE1/4
Priority 3	
Castle Creek	T39N, R79W, Sec. 15, SW1/4NE1/4
Upper Salt Creek	T38N, R77W, Sec. 6, SW1/4NW1/4
Dry Fork of Badwater Creek	T39N, R88W, Sec. 33, NW1/4NE1/4
Badwater Creek	T39N, R89W, Sec. 15, NE1/4NE1/4
Priority 4	
Iodiao Creek	T38N, R83W, Sec. 23, NW1/4NE1/4
Cloud Creek	T39N, R82W, Sec. 15, NE1/4SE1/4
Alkali Creek	T37N, R89W, Sec. 5, NW1/4NE1/4

*SWA2: Surface Water Protection

For the protection of surface water, surface development would be prohibited in the following areas: within ¼ mile of the North Platte River; within 600 feet of the Laramie River; within 500 feet of live streams, lakes, reservoirs, and canals and associated riparian habitat; within 500 feet of water wells; and within 660 feet of springs or artesian and flowing wells. These distance restrictions, including the one below, may be waived in writing by the district manager if potential impacts can be acceptably mitigated. The ¼-mile limitation is not to be waived on the Trappers Route tracts.

Surface development would be prohibited within 200 feet of intermittent and ephemeral streams (as identified on USGS 7 ½ minute topographic maps). The restriction applies to intermittent streams and well-defined ephemeral streams that may carry sufficient amounts of water to damage surface facilities. An ephemeral stream is defined as a stream or reach of stream that flows briefly only in direct response to the precipitation in the immediate locality and whose channel is at all times above the water table.

This stipulation is applied to intermittent streams and well-defined ephemeral streams where watershed conditions indicate that the potential exists for the stream to carry sufficient quantities of water to result in damage to dike channel. This decision is applied case by case. It will not apply

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to every topographic depression or every drainage that might conceivably carry runoff at some time; rather, it applies to key drainage areas that have the potential to affect live streams.

***SWA3: Soil Protection**

Surface development is not permitted from December 30 to June 1 in the South Fork Powder River drainage, Coal Mountain-Twin Buttes area, Pine Mountain, Rattlesnake Range, Holiday Draw, Badwater-Deadman Butte area, Pine Ridge, and Bear Peak.

Surface development is not permitted from November 30 to June 1 on Muddy Mountain and the front range of the Laramie Mountains or from October 1 or first lasting snow to June 1 in South Big Horn Mountains.

Seasonal limitations do not apply to maintenance of existing facilities, and they may be waived in writing by the district manager.

SWA4: Slope Restrictions

No occupancy or other surface disturbance is allowed on slopes of more than 25% without written permission from the district manager. When development is proposed on slopes of more than 15%, engineered drawings for construction, drainage design, and final contours proposed after rehabilitation will be required. No occupancy on slopes over 25% would be allowed in the South Big Horns (RMU-1).

***SWA5: Cedar Ridge**

Because of fragile watershed conditions, no surface development is allowed on Cedar Ridge without the written permission of the district manager.

SWA6: Winter Construction

Snow and ice are not to be mixed with subsoil material during construction of surface facilities.

SWA7: Fencing of Reseeded Areas

Disturbed sites will be fenced with sheep-tight fence for two growing seasons to prevent grazing, if fencing is prescribed by the area manager.

SWA8: Reseeding

All disturbed sites are to be reseeded. Fall seeding of each disturbed site should be completed after September 1, and before ground frost. Spring seeding should be completed after the frost has left the ground, and before May 15. Seed mixture, application rate, and planting depth for each action will be defined by the area manager.

SWA9: Fragile Areas

The following fragile areas will be evaluated to determine the need for special management. Special management could include development of a management plan, establishing appropriate protective measures, and placement of structures.

Alcova Rim; Mikes Draw, T. 37 N., R. 83 W.; Head of Small Creek, T. 36 N., R. 82 W.; and in T. 38 N., R. 82 W., Section 4, and T. 39 N., R. 82 W., Sections 33 and 34.

SWA10: Rims and Gorges

Surface development will not be allowed within the rims of the following canyons and gorges: Deer Creek Canyon, Box Elder Creek Canyon, Rock Creek Canyon, Wagonhound Gorge, Brighton Canyon, Baldy Ridge and Peak, and Goshen Hole Rim.

Wildlife

***WL1: Habitat Management Plans**

The PRRA currently manages three wildlife areas. Table Mountain and Springer/Bump-Sullivan are managed in cooperation with the Wyoming Game and Fish Department through the implementation of completed HMPs.

For Table Mountain (1,540 acres), no surface development is allowed except for wildlife improvements. Improvements now in place are 9 reservoirs, islands constructed in reservoirs, 12 shelterbelts, approximately 150 goose nest structures installed in ponds and on islands, aerators in reservoirs 1 and 8, and fences. The Table Mountain area would be recommended for withdrawal from operation of the 1872 Mining Law.

We will seek to acquire 20 acres through exchange. This acquisition would increase duck and pheasant nesting habitat and provide a buffer zone to protect a pond that serves as a resting area for geese.

For Springer/Bump-Sullivan (600 acres), no surface development is allowed except for wildlife improvements. Reservoirs, fences, shelterbelts, and goose nest structures are now in place in this area. This area would be withdrawn from operation of the 1872 Mining Law.

A draft preliminary plan has been prepared for Jackson Canyon, which is managed solely by the BLM. Jackson Canyon is described in the "Special Designations" section near the end of this appendix.

HMPs will be prepared for Bates Creek Reservoir, Bates Creek aquatic habitat, Upper Laramie River, Teal Marsh Reservoir, Thirty-three Mile Reservoir, Rawhide Unit, Medicine Bow, Bolton Creek, and Stinking Creek.

For Bates Creek Reservoir, we will pursue acquisition of 3 miles of access across state land, conduct prescribed burning, monitor sage grouse use, construct islands, and monitor waterfowl use.

For Bates Creek aquatic habitat (700 acres) we will fence portions of the stream to exclude livestock, obtain a walk-in easement of ¼ mile, identify and designate a primitive parking area, and fence that area to restrict vehicle traffic. We will monitor fishing pressure and cooperate with WGFD in stocking fish or improving streams.

For the Upper Laramie River (600 acres), we need to obtain easements for 1 ¼ miles of road and for ¼ mile for walk-in. Acquisition of these easements is a low priority; they would not be acquired unless the BLM could provide necessary management, including enforcement and maintenance. We would construct a primitive parking area if access is acquired in the future. We will monitor fishing pressure and cooperate with WGFD to identify the need for stocking fish and for stream improvements.

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For Teal Marsh Reservoir (80 acres) and Thirty-three Mile Reservoir (80 acres), we will provide enclosure fences and monitor range condition and waterfowl use.

For the Bolton Creek Aquatic HMP (200 acres) we would construct an enclosure fence for monitoring purposes. The WGFD manages wildlife populations, including beaver. The BLM manages wildlife habitat. Management of beaver populations to raise the water table is proposed.

For the Stinking Creek Aquatic HMP (500 acres), we will construct an enclosure fence for monitoring purposes and transplant and manage beaver populations in coordination with the WGFD.

For the Medicine Bow HMP (about 50,000 acres) we would control beaver in coordination with WGFD where riparian vegetation has been destroyed, develop springs and seeps to provide year-round water, temporarily exclude livestock from riparian areas as needed, and establish cottonwood perch trees in bald eagle winter habitat.

For the Rawhide Unit HMP (200 acres) we would consider construction of goose nesting structures on islands and riverbanks. We would control cattails and bulrushes as needed, control noxious weeds, and construct a parking area and canoe launching site. This would be a cooperative effort with the WGFD.

*WL2: Antelope Habitat Management

Throughout critical antelope winter range in Natrona County, we would correct fences on public land that do not meet the specifications in the *BLM Manual*, section 1737 if it is determined that a fence restricts antelope movement. Fence construction on all antelope range will conform to the standards set forth in Section 1737.32A of the *BLM Manual*.

Permanent water sites for antelope would be developed, if water is available, in the following areas: T30N, R85W, NW $\frac{1}{4}$; T30N, R86W, NE $\frac{1}{4}$; T31N, R85W, SW $\frac{1}{4}$; T31N, R86W, E $\frac{1}{2}$; T35N, R82W, E $\frac{1}{2}$; T36N, R82W, S $\frac{1}{2}$; T36N, R83W, N $\frac{1}{2}$; T37N, R82W, N $\frac{1}{2}$; T38N, R81W, W $\frac{1}{2}$; T37N, R83W.

No surface development will be allowed from November 1 through April 30 in critical antelope winter ranges. This decision can be waived by the district manager. It does not apply to maintenance of existing facilities.

*WL3: Deer Habitat Management

No surface development will be allowed from November 1 through April 30 in critical deer winter ranges. This decision can be waived by the district manager. It does not apply to maintenance of existing facilities.

A permanent water source will be provided in deer summer range in the vicinity of the Soda Beds, T36N, R83W, Section 31.

*WL4: Sage Grouse Leks

No surface development will be allowed within a radius of $\frac{1}{4}$ mile from the center of a sage grouse strutting ground (lek). So that the nesting area around the strutting ground can be protected, surface development will be allowed within $1\frac{3}{4}$ miles from the $\frac{1}{4}$ -mile protection zone only between June 15 and March 1. Exceptions to the time and distance limitations in any particular year may be authorized by the district manager.

*WL5: Critical Winter Range for Elk

No surface development will be permitted on the following parcels of the Muddy Mountain critical winter range for elk—a total of 3,360 acres.

T. 31 N.; R. 78 W.

Sec. 4: W $\frac{1}{2}$ W $\frac{1}{2}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 5: N $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 6: N $\frac{1}{2}$;

Sec. 7: E $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 8: W $\frac{1}{2}$, W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 9: S $\frac{1}{2}$, N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ NW $\frac{1}{4}$;

Sec. 10: W $\frac{1}{2}$ SW $\frac{1}{4}$;

Sec. 15: NW $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 17: N $\frac{1}{2}$ N $\frac{1}{2}$.

T. 32 N.; R. 78 W.

Sec. 31: SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 32: SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 33: S $\frac{1}{2}$ SW $\frac{1}{4}$.

Critical winter range for elk in T31N, R78W, Sec. 9, S $\frac{1}{2}$ NE $\frac{1}{4}$ will be subject to the following stipulation.

Lessee, by accepting and executing this lease, acknowledges that it is being issued solely for the lessee's personal reasons, at his personal request; and lessee further acknowledges that this lease is issued with the understanding that, because of the prohibition against surface occupancy on the leased and adjoining acres, extraction of the leased mineral is not practical. Therefore, lessee hereby agrees to and does waive as grounds or reasons for any appeal his inability to extract or develop the leased minerals due to the prohibition against surface occupancy contained herein.

The remaining critical winter range for elk in the resource area will be leased subject to the following stipulation:

No surface development will be permitted from November 1 through April 30. This would not apply to maintenance of existing facilities.

*WL6: Bald Eagles

No surface development will be permitted on the following winter roosting areas for bald eagles. This is a total of 15,764 acres.

T. 32 N.; R. 79 W.

Sec. 18: Lot 5;

Sec. 19: Lots 1, 3, 5, 6, 7, 8, and 10 through 66;

Sec. 20: Lot 5, SW $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 30: Lots 1, 2, 3, 4, E $\frac{1}{2}$ W $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 31: Lots 1, 2.

T. 32 N.; R. 80 W.

Sec. 7: Lots, 1, 2, 5, 6, 7, 8, 9, 14, 15, 16, 17, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$;

Sec. 8: Lot 4, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$;

Sec. 9: S $\frac{1}{2}$;

Sec. 10: S $\frac{1}{2}$ SW $\frac{1}{4}$;

Sec. 13: SE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 14: SE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$;

Sec. 15: W $\frac{1}{2}$;

Sec. 17: Lots 5, 6, NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 18: Lots 5, 7, 8, 12, 13, 14, 15, 16, 17, 18, 20, 21, SE $\frac{1}{4}$;

Sec. 19: Lots 3, 6, 13, 14, 15, 16, 17, 18, 20, SW $\frac{1}{4}$ NE $\frac{1}{4}$;

Sec. 20: Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, NE $\frac{1}{4}$;

Sec. 21: Lots 1, 2, 3, 4, NW $\frac{1}{4}$;

Sec. 22: All;

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WL10: Riparian Habitat

Stream bank cover will be planted and the plantings fenced at the North Fork and Middle Fork of Buffalo Creek and the North Fork and Middle Fork of Trout Creek.

Special Designations

*SD1: Pterodactyl Track

The Pterodactyl Track area will be evaluated for significant paleontological resources. A mineral withdrawal from the 1872 Mining Law will be recommended. No surface occupancy would be allowed inside the withdrawal area. The 1,200-acre ACEC designation will be eliminated.

*SD2: Red Wall

The ACEC designation for the Red Wall will be eliminated. Surface development will not be allowed within ½ mile of either side of the Red Wall.

SD3: Salt Creek ACEC

The Salt Creek drainage to its confluence with the South Fork of the Powder River is managed as an ACEC. Salt Creek and portions of Teapot Creek that have been identified as sensitive drainages are included in the Salt Creek ACEC. Implementation of the ACEC plan will be in the following priority order: Salt Creek oil field, Smokey Gap oil field, and East Teapot oil field.

Short-term, intermediate, and long-term stream monitoring surveys (Level II) will be continued in the ACEC as defined in the "Soils, Water, and Air" section of this appendix under "SWA1: Watershed Plans."

The Salt Creek ACEC plan will be revised to provide for inventory and evaluation of historic oil and gas sites, structures, and townsites that may be eligible for nomination to the National Register. The Salt Creek oil field will be designated as a historic district if applicable. In no case will the designation interfere with oil and gas development or production in producing fields within this area.

*SD4: Jackson Canyon ACEC

The Jackson Canyon ACEC contains 3,600 federal surface acres and 11,150 federal mineral acres, for a total of 13,760 acres in the ACEC. We would control pine beetle infestations in this area through a more active forest management program, designate bald eagle roosts as priority full suppression areas for wildlife control, evaluate whether or not oil and gas leases should be renewed, and incorporate fire suppression as part

of the HMP. We also would install signs and road closures and monitor conflicts between recreation use and eagles. A withdrawal will be recommended on 3,600 acres of federal mineral estate in bald eagle roost areas.

No rights-of-way will be permitted in this ACEC. ORV use will be allowed only on designated roads and only from April 1 through October 31. There will be no increase or improvement in roads or legal access. The ACEC will be managed in accordance with the ACEC Wildlife Habitat Management plan.

Fire suppression will be conducted as needed. Beetle control will be conducted only between April 1 and October 31.

*SD5: Muddy Mountain Environmental Education Area

The 1,260-acre Muddy Mountain EEA will be managed for recreation, wildlife, forest resources, and environmental education. Campgrounds, the interpretive center, fences, and trails will be maintained. The area will be recommended for withdrawal from the operation of the 1872 Mining Law.

A winter snowmobile area, a forest demonstration area, and a natural area will be provided. The 700-acre natural area will be protected from development. Full forest management will proceed in this area to control beetles and manage stands.

*SD6: Casper Sand Dunes

The 13,560 acres of the Casper Sand Dunes will be managed to protect fragile watershed values. ORV use will be confined to existing roads and trails during big game hunting seasons and on designated roads and trails the rest of the year. We will pursue acquisition of access to this area only if public demand and landowners' cooperation is evident. Grazing leases will be maintained.

SD7: Natural Landmarks

Surface development proposals in the following natural landmarks would be evaluated case by case to determine impacts to the site. If the impacts are not significant and can be mitigated, the development would be allowed.

Hells Half Acre, T35N, R56W, Sec. 1: N½SW¼, N½SE¼; T35N, R85W, Sec. 6: NW¼, N½SW¼

Badwater Grey Hills, T39N, R88W, Sec. 21: SE¼, Sec. 28: W½NE¼, Sec. 33: SW¼NE¼, SE¼SE¼; T38N, R88W, Sec. 4: All, Sec. 5: All

Rainbow Hills of Arminto, Sec. 4: E½, E½W½, NW¼NW¼, Sec. 5: SW¼SW¼, Sec. 7: SW¼SE¼, Sec. 8: SE¼, E½SW¼, SE¼NW¼, S½NE, NE¼NE¼, Sec. 9: All, Sec. 17: W½, Sec. 18: NW¼NE¼

Precambrian Gneiss of the Big Horns (no federal surface).

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Sec. 23: SW $\frac{1}{4}$;
Sec. 24: W $\frac{1}{2}$, E $\frac{1}{2}$ E $\frac{1}{2}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
Sec. 25: S $\frac{1}{2}$, S $\frac{1}{2}$ N $\frac{1}{2}$, N $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$;
Sec. 26: E $\frac{1}{2}$;
Sec. 27: Lots 1, 2, 3, 4, 6, 7, 8, 9, 10, 14, 15, 16;
Sec. 34: Lots 1, 2, 3, 6, 7, 8, 9, 10, 15;
Sec. 35: E $\frac{1}{2}$.

T. 31 N.; R. 80 W.

Sec. 2: Lots 1, 2, 3, 4, S $\frac{1}{2}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 32 N.; R. 81 W.

Sec. 12: S $\frac{1}{2}$ S $\frac{1}{2}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 13: All;

Sec. 14: E $\frac{1}{2}$ E $\frac{1}{2}$.

T. 33 N.; R. 81 W.

Sec. 13: W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 14: NE $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 15: S $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 23: W $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 24: NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$;

Sec. 25: NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 26: NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$.

T. 35 N.; R. 83 W.

Sec. 19: W $\frac{1}{2}$ SW $\frac{1}{4}$;

Sec. 30: W $\frac{1}{2}$ NW $\frac{1}{4}$.

T. 34 N.; R. 84 W.

Sec. 2: NW $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 3: N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$.

T. 35 N.; R. 84 W.

Sec. 13: SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 24: E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;

Sec. 25: NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$;

Sec. 27: SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 28: SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 33: E $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 34: All;

Sec. 35: W $\frac{1}{2}$ SW $\frac{1}{4}$.

Leasing in the following bald eagle winter roosting areas will be subject to the stipulations shown below the legal description (1,920 acres).

T. 32 N.; R. 80 W.

Sec. 10: S $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 14: W $\frac{1}{2}$;

Sec. 15: E $\frac{1}{2}$;

Sec. 23: N $\frac{1}{2}$, SE $\frac{1}{4}$.

T. 33 N.; R. 81 W.

Sec. 23: SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 24: W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 25: N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$.

T. 32 N.; R. 80 W.

Sec. 8: Lots 3, 5, 6, 7, 8;

Sec. 17: Lots 1, 2, 3, 4;

Sec. 18: Lot 19.

Lessee, by accepting and executing this lease, acknowledges that it is being issued solely for the lessee's personal reasons, at his personal request; and lessee further acknowledges that this lease is issued with the understanding that, because of the prohibition against surface occupancy on the leased and adjoining acres, extraction of the leased mineral is not practical. Therefore, lessee hereby agrees to and does waive as grounds or reasons for any appeal his inability to extract or develop the leased minerals due to the prohibition against surface occupancy contained herein.

On the remaining bald eagle winter habitat in the resource area, no surface development will be allowed from November 1 through March 31.

No disturbance to trees or improvement in roads or legal access will be allowed in bald eagle winter ranges except as needed for fire suppression or to control pine beetle infestations. Pine beetle control efforts within bald eagle winter habitat will be conducted only from April 1 to October 31.

*WL7: Raptors

Where surface development proposals threaten the active nests of high federal or state interest raptor species, the PRRA will designate a suitable biologic buffer zone around the nest or nests where no surface development is permitted during the nesting season. Species identified jointly by the BLM, the U.S. Fish and Wildlife Service, and the Wyoming Game and Fish Department as high interest species are bald eagle, golden eagle, osprey, peregrine falcon, prairie falcon, merlin, ferruginous hawk, Cooper's hawk, Swainson's hawk, and burrowing owl. An active nest is defined as one that has been used at least once during the previous three years.

The size of the buffer zone will be determined case by case by the BLM area manager, who will consider topography and raptor prey habitat surrounding the nest site. Usually the buffer zone will be $\frac{1}{4}$ to $\frac{1}{2}$ mile. BLM personnel will determine buffer zones for active eagle nests and for cliff nesting sites of falcons in consultation with the U.S. Fish and Wildlife Service.

Nesting seasons are as follows: bald eagle, November 1 through April 1; golden eagle, February 1 through July 15; osprey, merlin, and Cooper's hawk, April 15 through August 15; peregrine falcon and prairie falcon, March 15 through August 1; ferruginous hawk, March 15 through July 15; Swainson's hawk, April 1 through July 31; and burrowing owl, April 15 through July 15.

WL8: Turkeys

No tree cutting will be allowed in critical winter habitat for turkeys (2,360 acres).

WL9: Black-footed Ferrets

No surface development will be allowed within prairie dog towns until it is determined that a development proposal will not adversely affect the black-footed ferret. Such determination will be made through a biological assessment by the BLM or through consultation with the USFWS under Section 7 of the Endangered Species Act.

Prairie dog control may be initiated where the following criteria are met:

Treatment of prairie dog towns will be considered only if a written request is received from the adjacent landowner or grazing lessee.

A ferret search will be conducted on public lands before approval is granted for treatment. No prairie dog control measures will be allowed on public land in areas where black-footed ferret sightings or confirmed sign has been recorded within the last five years, or if the U.S. Fish and Wildlife Service determines the town is essential habitat for the survival of the ferret.

No prairie dog control measures will be done on prairie dog towns that are more than $\frac{1}{2}$ mile from private land.

Treatment of private land must be done concurrently with treatment of public land.

APPENDIX G: SUMMARIES OF OIL AND GAS

PLATTE RIVER OIL AND GAS EA

Scope

The Platte River Resource Area Oil and Gas EA (WY-062-1-13; March 1982) analyzed and described the impacts of oil and gas leasing alternatives in the resource area. It provided the public with a description of environmental consequences associated with leasing alternatives and enabled the BLM to make better decisions about the multiple resources that could be affected. Areas were described where no leasing would occur, where leasing could occur, and areas that could be leased with special provisions. Mitigating measures that would reduce environmental effects were also identified and discussed.

In addition, the EA analyzed all support requirements, both on and off lease sites, that would be necessary for development of a lease, and it identified impacts of geophysical exploration on land open to leasing. Off-lease developments are rights-of-way for roads, power lines, pipelines, communication sites, material sales, and other related developments associated with lease development. On-lease developments include tank batteries, reserve pits, disposal pits, storage areas, and related facilities. Planning decisions that constrain oil and gas development are identified in appendix B, where they are identified with an asterisk.

Purpose

The purpose of leasing federal oil and gas is to help meet the national demand for energy fuels. This also follows the U.S. Department of the Interior's energy initiatives and national policy. The BLM, as a part of the Department of the Interior, encourages oil and gas development on federal mineral estates by providing the private sector with access to as much of the federal mineral estate with oil and gas development potential as possible. This access is subject to restraints of legislatively decreed responsibilities found in federal and state statutes and in local agency regulations.

The BLM has no jurisdiction regarding the leasing or development of private minerals, and this document does not address those areas.

Legal Restrictions

Legal restrictions prohibit leasing within incorporated city, town, or village limits; in national parks and monuments, and within 1 mile of naval petroleum reserve boundaries. Lands affected by these restrictions in the resource area are Fort Laramie National Monument in Goshen County and Naval Petroleum Reserve 3 in northeastern Natrona County.

Analysis

This was a programmatic EA—it did not analyze specific well sites or other specific practices. The primary purpose was to identify cumulative impacts at an assumed rate and type of development, as discussed in the assumptions and analysis guidelines in the EA. As individual applications are received, they will be reviewed to determine the applicability of this analysis to the project. If the individual project is determined to be outside the scope of this EA, additional analysis will be completed.

To help determine the major issues that should be discussed in the EA, a scoping workshop was conducted on April 15, 1981. Workshop participants represented a variety of special interests including the oil and gas industry, environmental groups, ranching, and wildlife management. The following issues were identified:

Fencing of abandoned locations until vegetation could be reestablished

Inclusion of forb and shrub seed in the seed mixture

Muffling of pumpjacks, drilling rigs, etc., near sensitive wildlife and recreation areas

Methods of keeping waterfowl out of pits

Areas of Environmental Concern, as follows:

- a. Golden eagle nests near Bill, Wyoming
- b. Bald eagle roosts near Antelope Creek in Converse County
- c. Edness Kimball Wilkins State Park
- d. Areas along the North Platte River between Glenrock and Glendo Reservoir, as identified by Wyoming Game and Fish Department
- e. Cody Shale outcrop areas

Well pad size

Reduction of environmental damage and construction cost by placing rib substructure on compacted fill

Elimination of spiderweb effect of roads

Addition of cereal grain nurse crops to seed mixture for improved success of rehabilitation

Need for improved road construction standards

Unrestricted use of roads on public lands

Alternatives Considered

The following alternatives were initially considered for analysis in the EA:

The Proposed Action, which would have resulted in the continuation of leasing under existing laws and regulations, with current stipulations and restrictions included in the

management decisions of three MFPs. These MFPs were developed for the management of public lands in the four counties of the resource area.

Alternative 1, No Leasing, would have permitted no new leasing for oil and gas development. This would have afforded a maximum level of protection for all natural resources.

Alternative 2, Leasing with Special Stipulations, would have allowed leasing under stipulations that could increase or decrease the level of protection currently provided by existing laws, regulations, and standard stipulations.

Alternative 3, Leasing with No Restrictions, would have allowed leasing without any sort of restrictions or protective measures.

Decisions

BLM staff review, as well as public review and comment during the scoping process, resulted in the elimination of Alternatives 1 and 3 from further consideration. These alternatives were not analyzed in the EA. The rationale for their elimination is as follows:

Alternative 1, No Leasing: This alternative was not consistent with current governmental policy or initiatives to meet growing energy needs through leasing with multiple use management guidelines. Comments received at a public workshop indicated that consideration of such an alternative would not be reasonable.

Alternative 3, Leasing with No Restriction: This alternative was found to be inconsistent with NEPA and FLPMA and management policies related to those laws. Comments received at a public workshop indicated that consideration of such an alternative would not be valid and led to the conclusion that some level of protection was needed through restrictions or stipulations.

This EA documented the analysis of only the Proposed Action and Alternative 2, Leasing with Special Stipulations.

The Proposed Action

The BLM has established criteria for the protection of the environment in the PRRA through the use of standard stipulations and land use planning through MFP documents. Stipulations are applied case by case at the time of the field examination, depending on the requirements of resources at each site.

The BLM's proposed action was to continue issuing oil and gas leases in the PRRA, subject to the standard stipulation, conditions identified in the MFPs, laws, and regulations, and the stipulations applied at the time of the field examination of each site.

Activities Related to Oil and Gas

Activities associated with geophysical exploration, leasing and development, and rights-of-way, as they relate to the proposed action, are as follows: Geophysical exploration, leasing, drilling operations, development and production, and

abandonment and rehabilitation. The oil and gas EA presents a comprehensive description of these activities and the consequences of oil and gas development in the PRRA. Copies of the EA are available for the public at the Casper District office.

Rationale for Selecting the Preferred Alternative

After consideration of public review and comment it was determined that Alternative 2, as modified by the EA decision record, would allow ample opportunity to explore and develop oil and gas resources. At the same time it would allow greater flexibility to protect surface resources in the PRRA. This alternative provided opportunity for reducing areas previously restricted from exploration and development of the oil and gas resource. Land use decisions analyzed under this alternative allow for both increasing or decreasing protective measures as necessary. Mitigating measures in the form of stipulations are identified in the EA.

SOUTH BIG HORN MOUNTAINS OIL AND GAS EA

Scope

The Platte River Resource Area has prepared an EA for the South Big Horn Mountain Area in northwest Natrona County, *Southern Big Horn Mountain Oil and Gas Leasing* (EA No. WY-062-9-52, 1979). That EA, prepared after an offer was received to lease about 70,000 acres in the South Big Horn area, identified areas of leasing with restrictions, areas of no leasing, and restrictions that may be applied to leases in the area. Planning decisions that constrain oil and gas development are identified in appendix B, where they are identified with an asterisk.

Purpose

To determine if the area should be leased, and if so, what stipulations should be applied to mitigate the environmental consequences resulting from oil and gas exploration and development.

Physical Setting and Environment

The area, which is in northwestern Natrona County, is rough and broken. Soils are fragile and erode easily. Elevations range from 6,160 feet to 8,660 feet, with maximum relief of 2,500 feet. The area is covered with sage and grass, with less than 5% timber. An elk herd of about 500 inhabits the area. Raptors and sage grouse are commonly seen. The perennial streams hold native trout. There are grazing leases throughout the area. No active mining or oil wells exist, and the area is considered to have low potential for oil and gas.

Alternatives Considered

Alternative 1: Reject the lease application

Alternative 2: Accept the lease application with no stipulations

Alternative 3: Accept all or portions of lease offers with stipulations

Conclusions

Alternative 3 was accepted. Fourteen stipulations were developed to be applied to the various leases where needed. The stipulations are as follows:

1. No occupancy or other surface disturbance will be allowed on slopes in excess of 25%
2. Occupancy will be permitted no closer than 500 feet from the edge of perennial streams or riparian habitat.
3. Every attempt will be made to avoid disturbing exposed portions of the Madison Limestone Formation. If location and/or pit construction exposes the Madison Formation, the pits will be lined with plastic, and all sludge and fluids will be pumped from the reserve pit at the time of abandonment to avoid the possibility of contaminating the groundwater. When the formation is drilled through, the hole will be lined with concrete to prevent crossover.
4. All vehicular traffic will be restricted to existing roads and trails unless otherwise indicated.
5. No construction will be permitted during periods when the soil is wet from rain or snow.
6. Exploration and development will be permitted only from June 1 through September 30 or the first lasting snow, whichever comes first. This is to protect wintering elk, calving elk, and the watershed.
7. To maintain esthetic values, all semipermanent and permanent facilities will require painting or camouflage to blend with the natural surroundings. The paint selection or method of camouflage will be subject to approval by the district manager, Bureau of Land Management.
8. Drilling locations will be fenced with sheep-tight fence until such time as division of operations releases the company from its reclamation bond.
9. Rehabilitation will commence as soon after drilling is completed as is feasible. Reseeding will include mixtures of native shrubs, grasses, and forbs.
10. No surface occupancy will be permitted within ½ mile of either side of the Red Wall.
11. See wildlife decision WL-7 in appendix B.
12. Access roads and well locations shall avoid stands of trees and mountain mahogany.
13. All location and road construction will be monitored by the district engineer or his representative.
14. A preliminary environmental review will be conducted on each location prior to staking.

APPENDIX H

SUMMARY OF COAL PLANNING IN THE PRRA AND TBNG

CONVERSE COUNTY COAL AMENDMENT

Introduction

This summary documents a BLM planning amendment to the 1977 Eastern Powder River Basin MFP and deals only with coal management decisions in northern Converse County, Wyoming. The amendment was completed early in 1983.

The Thunder Basin National Grassland in the extreme northeast corner of the county is administered by the Forest Service, which released a coal unsuitability criteria assessment on the grassland in 1982. The national grassland area is included in this summary.

Several things should be kept in mind regarding this summary. All figures for coal resources are approximate, based on data obtained from Coal Resource Occurrence-Coal Development Potential (CRO/CDP) maps. The figures apply only to the high and moderate development potential federal coal areas identified on map 2 on the Converse County coal amendment document. Tonnage projections are for federal planning purposes only, as CRO/CDP maps do not identify coal tonnages for nonfederal coal. To determine tonnage estimates for state, private, and federal coal, an estimate of the average tons per acre was projected from the CRO/CDP maps.

The term "high and moderate coal" in the amendment refers only to *federal* coal with high and moderate potential for development by surface mining methods. The CRO/CDP maps for the review area indicate that all the high-moderate development potential coal is best suited to surface mining. High coal development potential for surface mining in Converse County has a stripping ratio of 0 to 10 cubic yards of overburden per ton of coal. Moderate coal development potential for surface mining has a stripping ratio of 10 to 15 cubic yards of overburden per ton of coal in the county.

Because of recent changes, the coal planning regulations no longer address coal land in terms of high or moderate development potential. A call for coal resource information was published in conformance with the current regulations in conjunction with this RMP. Since there were no responses to the call, no coal lands are addressed in the RMP except the areas with high and moderate development potential already considered.

Purpose, Need, Conformance

This amendment was initiated to ensure that the Converse County portion of the Eastern Powder River Basin MFP would reflect and be in conformance with current statutory requirements and policies relating to potential federal coal development. The MFP covering the review area was prepared in 1977, prior to passage of the Surface Mining Control and

Reclamation Act of 1977 and the subsequent adoption of the BLM planning regulations and the Federal Coal Management Program by the Secretary of the Interior in 1979. Specifically, this appendix summarizes the BLM federal coal management decisions for northern Converse County.

Objectives

The objectives of the amendment were to determine, through land use planning and application of the coal screening process, which BLM-administered federal coal lands in northern Converse County were acceptable pending study, deferred, or unsuitable for coal development and to identify the lands available for further consideration for new competitive coal leasing, emergency leasing, lease modifications, or exchanges.

Area Description

The northern Converse County review area lies within the Powder River Coal Region. The review area is composed of approximately 323,000 acres with about 48,000 acres of uncommitted high to moderate federal coal in Converse County, exclusive of the Thunder Basin National Grassland. Of this 48,000 acres, there are approximately 41,200 acres of state and privately owned surface overlying about 722 million tons of federal coal resources. Of this, only 360 acres containing about 10 million tons of coal is state surface. Approximately 7,600 acres with about 112 million tons of the coal resource are federally owned surface. Figures for state and private coal lands are not available. The review area contained no areas where federal surface overlies nonfederal coal.

Alternatives Considered

No Action Alternative

The No Action alternative was a continuation of existing management. Since the current MFP coal management decisions were not in conformance with new federal coal program requirements, they were invalid. A reassessment and any necessary modification of those decisions was required before federal coal leasing could be considered in this review area.

The environment would not be affected by this alternative, as no federal coal areas would be leased or developed. Opportunities for development would be forgone and the lands would remain closed to further consideration for leasing federal coal.

Proposed Action

Under the Proposed Action alternative, the MFP was brought into conformance with current laws, regulations, and policies. It identified the BLM-administered lands acceptable for coal development and for further consideration for leasing.

As a result of this alternative, approximately 555 million tons of high-moderate federal coal was determined to be acceptable for coal development and available for further consideration for coal leasing. The decision only identified lands acceptable for future coal development and leasing consideration. Should coal tracts be delineated in northern Converse County, there is no guarantee they would be leased or developed. Following any tract delineation, the environmental consequences of developing the coal would be addressed in a site-specific analysis and in a regional coal EIS before tracts could be offered for sale.

Should leasing and development occur, it is probable that there would be some environmental consequences such as socioeconomic impacts throughout the Powder River Coal Region, including northern Converse County and the communities of Douglas and Glenrock. Surface disturbances either would not be allowed or would be mitigated through compliance with mining operation stipulations and existing laws governing reclamation. Adverse or beneficial site-specific and cumulative impacts would be identified in the site-specific analysis and the regional coal EIS mentioned above.

COMPETITIVE FEDERAL COAL AREAS (SURFACE COAL MINING)—PRRA

A sequential four-step coal screening process is used in the identification of areas that are acceptable for coal development and for further consideration for leasing. The steps are described below, followed by a summary of the findings and related recommendations. All acreage and tonnage figures are approximate. Additional detailed documentation and background information are available for public review at the PRRA office.

Step 1: Identification of Coal Areas

The coal review areas with development potential for surface mining were identified using CRO-CDP maps. No additional areas of interest were indicated through a call for coal resource information.

Approximately 48,800 acres with a coal reserve base of about 834 million tons of federal coal were identified as having high to moderate coal development potential in the review area.

The remaining three screening steps were applied to the coal areas identified in Step 1. These steps are applied in sequence and only to the lands identified as acceptable for coal development in each preceding step.

Step 2: Application of Coal Unsuitability Criteria

As required by 43 CFR 3461, the 20 coal unsuitability criteria were applied to the coal review areas identified in step 1. The purpose of this step is to identify areas with key features or environmental sensitivity that would make them unsuitable for surface coal mining operations.

The following discussion briefly explains the findings resulting from application of each criterion. Table H-1 lists the findings by criterion and summarizes the overall results of the application of the unsuitability criteria.

Criterion 1: Federal Land Systems

No lands were determined to be unsuitable under criterion 1. There are no federal lands that meet the unsuitability definition in the review area.

Criterion 2: Rights-of-Way and Easements

No lands were identified where coal development would create significant conflicts with rights-of-way; therefore, no areas were determined to be unsuitable.

Most of the rights-of-way crossing the coal areas can be relocated to accommodate coal mining and related activities. Thus, the BLM made a general determination that most right-of-way areas are acceptable for coal development subject to valid existing rights and negotiations for relocating if necessary, appropriate stipulations, and consistency with current planning and management decisions. Any unforeseen conflicts in these areas would be identified and resolved during the coal activity planning process or in development of the mining and reclamation plan.

Criterion 3: Buffer Zones for Rights-of-Way, Communities, and Buildings

No lands have been determined to be unsuitable under criterion 3. No state or federal highways, schools, churches, community or institutional buildings, or public parks were identified in the federal high to moderate coal lands. One abandoned and two active ranch headquarters are within and adjacent to the coal review area. These locations would be further investigated should coal tracts be delineated to include any portion of them.

Criterion 4: Wilderness Study Areas

No areas were determined to be unsuitable under criterion 4. None of the lands in the review area are within a wilderness study area.

Criterion 5: Scenic Areas

No areas were determined to be unsuitable under criterion 5. None of the lands in the review area meet the scenic criteria as outlined in the unsuitability criteria.

Criterion 6: Lands Used for Scientific Study

No areas were determined to be unsuitable under criterion 6. None of the lands in the review area are under permit or are being used for scientific study.

Appendix H

TABLE H-1
SUMMARY OF RESULTS OF APPLICATION
OF UNSUITABILITY CRITERIA^a
(competitive federal coal areas)

Criteria	Unsuitable		Acceptable Pending Study	
	Approx. Acres	Million Tons	Approx. Acres	Million Tons
1. Federal land systems	0	0	0	0
2. Rights-of-way and easements	0	0	0	0
3. Buffer zones for rights-of-way, communities, and buildings	0	0	0	0
4. Wilderness study areas	0	0	0	0
5. Scenic areas	0	0	0	0
6. Land used for scientific study	0	0	0	0
7. Historic lands and sites			800	12
8. Natural areas	0	0	0	0
9. Federally listed endangered species habitat	0	0	283	7
10. State listed endangered species habitat	0	0	0	0
11. Bald and golden eagle nests	1,778	37	0	0
12. Bald and golden eagle roost and concentration areas	0	0	0	0
13. Falcon cliff nesting sites	206	7	0	0
14. Migratory bird habitat	0	0	0	0
15. Habitat for state high-interest wildlife	2,676	66	0	0
16. Floodplains	0	0	0	0
17. Municipal watersheds	0	0	0	0
18. National Resource Waters	0	0	0	0
19. Alluvial valley floors	0	0	555	15
20. State-proposed criteria	0	0	0	0

a. Figures are not additive because of overlap.

NOTE: This table does not include results of applying unsuitability criteria in the Thunder Basin National Grassland. That information is presented in table H-2.

Criterion 7: Historic Lands and Sites

Approximately 800 acres containing about 12 million tons of coal were determined to be acceptable pending study. Several sections of the Bozeman Trail are within the review area. Although the trail, or specific segments of it, may be eligible for nomination to the National Register, much of the trail has never been surveyed to determine actual conditions or the existence of significant historic resources. Both the BLM and the State Historic Preservation Officer feel that, pending study, some of the trail segment areas may be found to be acceptable for coal development with or without certain mitigation and protection requirements.

Criterion 8: Natural Areas

No areas were determined to be unsuitable under criterion 8. None of the lands in the review areas are designated as natural areas or National Natural Landmarks.

Criterion 9: Federally Listed endangered Species Habitat

No areas were determined to be unsuitable under criterion 9. The black-footed ferret and bald eagle are the only known

federally listed threatened or endangered species that may occur in the review area. Bald eagles are addressed under unsuitability criteria 11 and 12.

There are no known occurrences of black-footed ferrets within the review area. However, prairie dog towns are potential habitat for the ferrets, and approximately 283 acres containing about 7 million tons of coal will carry a stipulation requiring ferret searches and resulting habitat protection requirements in accordance with U.S. Fish and Wildlife Service guidelines. Ferret searches must be made within no more than one year prior to any surface disturbance in the potential habitat area(s).

Criterion 10: State Listed Endangered Species Habitat

No areas were determined to be unsuitable under criterion 10. The state of Wyoming has no endangered species list.

Criterion 11: Bald and Golden Eagle Nests

Approximately 1,778 acres containing about 27 million tons of coal were determined to be unsuitable for surface coal mining under criterion 11. There are 16 known golden eagle nests and their related buffer zones within or adjacent to the review area. These nests and buffers were identified by the BLM, the USFWS, and the WGFD. No bald eagle nests have been located in the review area.

Criterion 12: Bald and Golden Eagle Roosts and Concentration Areas

No areas were determined to be unsuitable under criterion 12. The review area contains no known bald and golden eagle roosts or concentration areas.

Criterion 13: Falcon Cliff Nesting Sites

Approximately 206 acres containing about 7 million tons of coal were determined to be unsuitable under criterion 13. A single prairie falcon nest has been identified within the review area. The nest and an appropriate buffer zone were identified by the BLM, the USFWS, and the WGFD.

Criterion 14: Migratory Bird Habitat

No areas were determined to be unsuitable under criterion 14. The review area contains no known federal coal lands that are high priority habitat for migratory bird species of high federal interest.

After an expression of interest is filed and before tract delineation, the BLM will further inventory a proposed tract area and adjacent land during the coal activity planning phase to refine the application of criterion 14. If the inventory reveals the presence of species or habitats affected by this criterion, the BLM will coordinate with the U.S. Fish and Wildlife Service to determine if any federal coal lands within the proposed tract area should be declared unsuitable, if the exception contained in the criteria could be applied, or if impacts could be mitigated.

Possible mitigating measures may include but would not be limited to, (a) construction of nesting platforms, rock cairns,

or other types of structures to provide nest sites where they are unavailable or will be destroyed by the mining; (b) planting of cottonwoods or other trees in suitable areas to provide further nesting sites; (c) establishment of permanent vegetative cover that will support a diverse prey base for raptors; or (d) provision of wooden fence posts and/or rock outcrops where natural perches have been destroyed.

Criterion 15: Habitat for State High-Interest Wildlife

A crucial sage grouse habitat of approximately 2,700 acres containing about 66 million tons of coal was determined to be unsuitable for surface mining under criterion 15. A total of ten sage grouse leks was identified in the review area. Five of the leks and a minimum crucial area were delineated to provide sufficient habitat for the regional population. The five other leks were determined to be acceptable for surface coal mining, since they are in an area where there is insufficient habitat to support a significant population and the sage grouse populations are shifting to the crucial habitat area. However, stipulations will be applied to any leases within ½ mile of these leks or any new leks identified in the area.

The lessee will be required to collect, at a minimum, the following data.

Population numbers: Annual counts of birds using the leks will be made at least four times between March 1 and April 30 to determine the numbers of strutting males and the numbers of females present so that population trends can be established.

Nesting use on the lease, to be determined through appropriate survey techniques. Further, if 30% or more of the sage grouse population that uses the monitored lek is found to nest on the leased area, the original vegetation status must be restored within two miles of the lek during reclamation.

Field surveys would be coordinated with the Wyoming Game and Fish Department.

Criterion 16: Floodplains

No areas were determined to be unsuitable under criterion 16. It was determined that none of the lands in the review area are floodplains as identified in the criterion.

Criterion 17: Municipal Watersheds

No areas were determined to be unsuitable under criterion 17. No municipal watersheds were identified in the review area.

Criterion 18: Natural Resource Waters

No areas were determined to be unsuitable under criterion 18. No national resource waters are located within the boundaries of the review area.

Criterion 19: Alluvial Valley Floors

The BLM, in consultation with the Office of Surface Mining (OSM) and the Wyoming government, concluded that final determination of

alluvial valley floors is the responsibility of OSM and the state of Wyoming at the time of mine plan approval and mine permitting. The following pertains only to "possible" alluvial valley floors identified by BLM.

The Dry Fork of the Cheyenne River and the Cheyenne River itself appear to be possible AVFs. Approximately 555 acres overlie federal high to moderate coal. These 555 acres with approximately 15 million tons of coal were determined to be acceptable for further consideration for surface coal mining pending final determination of alluvial valley floors by the OSM and the state of Wyoming. Approximately 542 acres with 14.7 million tons of coal overlap lands unsuitable under criterion 11, 13, and 15.

Criterion 20: State Proposed Criterion

No lands were determined to be unsuitable under criterion 20. The state of Wyoming has no proposed criteria.

Step 3: Evaluation of Other Multiple Use Conflicts

Step 3 involves consideration of other multiple use values not included in the unsuitability criteria and identification of additional areas that could be unacceptable for surface coal mining.

Potential multiple use conflicts associated with coal development on the identified federal coal lands are oil and gas production, existing mining claims, the Orpha Stock Trail Driveway, aquifers, and disposal of scattered tracts of public lands. These are discussed in detail below.

Conflict: Oil and Gas Production

Surface coal mining would conflict with oil and gas operations in existing, producing fields, which are called known geologic structures (KGSs). The KGSs in the review area overlie about 5,700 acres of federal coal lands containing about 127 million tons of coal.

Decision

Coal leasing may be deferred in KGSs where coal development would interfere with oil and gas operations and the economic recovery of the oil and gas resource, except where it can be shown that economic recovery of oil and gas related operations will be completed before possible coal mining operations would begin. Each proposal will be evaluated case by case, and coal mining and oil and gas operations would be allowed where conflicts can be avoided or mitigated.

Rationale

Deferment would not significantly affect coal development. The BLM has developed procedures for arriving at and applying this planning constraint to avoid conflicts between coal development and oil and gas development. The intent of the recommendation is to maximize production of energy resources and not to develop one resource to the detriment of another. The quantities of coal available for potential new

leasing make it unnecessary to create new conflicts between coal and oil and gas production within the planning unit.

The unsuitability criteria were applied to all high and moderate development potential coal within the review area, including that which fell within KGSs. Therefore, it will be possible to lift this constraint if it is determined that conflicts between oil and gas production and coal development can be mitigated.

The public has been invited to supply information indicating the production and operational status of specific oil and gas fields. They will again be invited to supply that type information during any formal call for expressions of coal leasing interest in the area. With confirmation that conflicts do not exist or can be mitigated, areas within the KGSs would be available for coal tract delineation and further consideration for coal leasing.

In addition, before potential coal lease tracts are delineated, a review of possible lease tract areas will be conducted. Any new information gathered in the field regarding oil and gas operations will be considered before coal tracts are delineated. This could result in KGS areas being available for coal leasing or new areas being deferred where conflicts exist.

Following tract delineation, any new oil and gas operations occurring within a coal tract or new oil and gas information regarding a tract will be analyzed during the coal activity planning process.

Conflict: Mining Claims

Numerous mining claims, most of them for uranium, have been filed in the review area. However, no active uranium mines overlie the federal coal lands at this time.

Decision

All federal coal lands with mining claims are acceptable for coal development and further consideration for existing leasing subject to valid existing rights.

Rationale

The claims require annual assessment work by the claimant to maintain the claim, and claims may be located at any time. It is not possible to determine at this time which lands, if any, may have claims on them in the future. The problem of specific mining claims will be addressed on a site-specific basis after tracts have been delineated and during the coal activity planning stages. Potential coal lessees should be advised of the possible existence of claims and the conflicts they could present.

Conflict: Orpha Stock Trail Driveway

There is a withdrawal in effect on the Orpha Stock Trail Driveway that precludes disposal of federal lands within the driveway. The withdrawal does not preclude mineral leasing but does preclude interruption of the use of the driveway for its intended purpose of trailing stock or any disruption of water rights. Approximately 2,920 acres containing 62 million tons of coal would potentially be affected by the stipulations of the withdrawal.

Decision

Federal coal lands within the Orpha Stock Trail Driveway are acceptable for further consideration for coal leasing or exchange, subject to stipulations and mitigation requirements that resolve any conflicts, unless and until the withdrawal is revoked.

Rationale

The Stock Driveway withdrawal does not preclude leasing of the lands for mineral development. Review and revocation of unnecessary withdrawals is now standard procedure, so the decisions are no longer necessary directives. The Orpha Stock Trail Driveway is now under review, but until the review and revocation are complete, potential lessees should be aware that the limitations on use previously stated exist on the driveway lands.

Conflict: Land Disposal

The current planning decision state that disposal of public lands in townships containing less than 1,200 acres of such lands will be pursued and that the lands will be available first for exchange or R&PP uses and then for sale.

Decision

The current planning decisions are consolidated and changed to the following: Isolated parcels (less than 1,280 contiguous acres) will be reviewed, categorized and prioritized for disposal and for retention for multiple resource management. All federal lands are acceptable for further consideration for coal leasing as a result of this decision.

Rationale

The existing decisions were not in conformance with current policy and would not allow for retention of isolated tracts with high resource potential or disposal of isolated tracts first by sale.

Conflict: Aquifers

An existing planning decision dealt with identifying locally important shallow aquifers and developing plans for their protection and management. The aquifers are coal beds in many cases.

Decision

The decision was rejected. All federal coal lands overlying shallow aquifers including those within the Fort Union and Wasatch aquifers, are acceptable for further consideration for coal leasing as a result of this decision.

Rationale

The future waters needs of the BLM and its lessees should

be protected because in some cases the local shallow aquifer may be the only source of water. This is due to low production or depth of other aquifers or the lack of reliable surface water. The aquifers have not been identified, and no management plans have been developed. With existing budget and personnel projections, it appeared unlikely that formal aquifer management plans would be written. State and federal laws and regulations concerning water and environmental protection requirements ensure protection of water rights and quality. Adequate and acceptable replacement or compensation for any affected water rights would be provided for in mining and reclamation plans prior to approval by the Wyoming DEQ.

Step 4: Surface Owner Consultation

Section 714 of the Surface Mining and Coal Reclamation Act (SMCRA) requires the BLM to consult with certain qualified owners of split estate lands (private surface ownership over federally owned coal) when surface mining of federal coal is being considered. This step involves only split estate lands within the identified federal coal areas being reviewed.

In the consultation process, qualified surface owners are asked to express their preference for or against surface mining of the federal coal under their private lands. Either an individual or a significant number of these surface owners expressing a preference against surface mining can result in the identification of split estate lands as unavailable for coal development. Such areas can still be considered for possible leasing beyond this land use planning stage, however. This is possible because the actual commitment of surface owner consent or refusal to consent does not occur until later in the coal activity planning process, prior to the offering of a lease for the federal coal involved.

Letters were sent to 42 surface owners of record in the federal coal areas under review. The owners were contacted to determine their preference for or against surface mining of their lands. Thirty responses were received; 19 of those expressed a preference against surface mining on at least a portion of their land. For purposes of the plan, those not responding were assumed to be in favor of surface mining on their lands.

The total preference against surface mining involved approximately 18,000 acres containing 341 million tons of coal. About 10,100 acres containing about 93 million tons of coal occurred in small and scattered tracts of federal coal. These scattered tracts will not be available for further leasing considerations unless surface owners have given their written consent for surface mining and the land use plan is maintained or amended as necessary.

Decision

The remaining 7,900 acres of federal coal lands containing about 248 million tons of federal coal are acceptable pending a determination of availability through further consultation with surface owners. Should coal lease tracts be delineated in this area where surface owners have expressed a preference against surface mining, the owners will again be contacted concerning surface owner qualifications and preferences regarding surface mining. If it appears the owner is qualified and intends to withhold consent to surface mining, those lands will not be included in a potential lease tract.

Summary of the Coal Screening Process

About 30,597 acres containing about 555 million tons of federal coal are acceptable for development. This area will be given further consideration for new competitive leasing, emergency leasing, lease modifications, and exchange proposals under the federal coal management program. Federal coal acceptable for development is shown on map 6.

COMPETITIVE LEASING— THUNDER BASIN NATIONAL GRASSLAND

The coal screening procedure applied in the Thunder Basin National Grassland (TBNG) was the same as that described previously. The results of the coal screening process are described below.

This summary documents the application of the unsuitability criteria as directed by regulations pertaining to the federal coal program (43 CFR 3461) and is in accordance with the May 20, 1980 USDA/USDI memorandum of understanding which provides for coordination in federal coal program planning. The coal screening process was presented in a report titled *Unsuitability Criteria Assessment: High to Moderate Coal Potential: Thunder Basin National Grassland* (USDA, FS 1983).

This amends part 217 of the existing Forest Service multiple use plan for the Thunder Basin National Grassland. In addition, this report will serve as the basis for decisions related to lands available for future coal leasing and will be incorporated in the forest planning process.

This information pertains specifically to lands within the identified high to moderate coal potential boundary which are not under an existing lease or preference right lease application. Separate reports have been prepared for existing leases and preference right lease lands. Estimates of coal reserves, however, include all lands within the high to moderate coal potential boundary.

Step 1: Identification of High to Moderate Coal Potential Lands

The Minerals Management Service (formerly Conservation Division, U.S. Geological Survey) identified the area of high to moderate coal potential on the Thunder Basin National Grassland. The review area encompassed about 206,000 acres.

Step 2: Application of Coal Unsuitability Criteria

As required by 43 CFR 3461, the 20 coal unsuitability criteria were applied to all the uncommitted coal lands within the high to moderate coal potential boundary.

With the exception of criteria 2, 3, and 19, all lands within the review area are acceptable for coal development and available for further leasing consideration. A total of 2,183 acres affecting an estimated 152 million tons of coal were found unsuitable. A total of 7,625 acres affecting an estimated 369 million tons of coal were placed in the "acceptable pending further study" category under the alluvial valley floor criterion. Prior to surface disturbance, the Wyoming Department of Environmental Quality would make a determination relative to the identified potential alluvial valley floors meeting the state's criteria for a true alluvial valley floor.

In addition, 11,379 acres involved in golden eagle nest buffer zones have been identified as areas requiring special lease stipulations. The special lease stipulations should not have any effect on the coal reserve within the buffer zones. Table H-2 summarizes the results of application of the unsuitability criteria in the TBNG.

TABLE H-2
RESULTS OF APPLICATION OF THE UNSUITABILITY CRITERIA
IN THUNDER BASIN NATIONAL GRASSLAND

Criterion	Unsuitable Acres	Tons of Coal Affected (millions)	Acceptable Pending Study		Requiring Special Stipulation
			Acres	Tons Affected (millions)	
1	0	0	0	0	0
2	1,761	136	0	0	0
3	422	16	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	11,379
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	7,625	369	0
20	0	0	0	0	0

Step 3: Multiple Use Conflicts

All the lands in the TBNG within the high to moderate coal potential boundary were evaluated in light of surface multiple land use conflicts. The purpose of the analysis is to identify and resolve, where possible, conflicts between coal development and other resource values.

Potential multiple land use conflicts associated with coal development within the high to moderate coal potential boundary include wildlife habitat management, range management, and limited recreation management. In addition, oil and gas exploration and development can cause significant problems when both coal companies and oil and gas companies are attempting to develop the same tract of land at the same time. Other mineral development such as uranium, bentonite, and locatable minerals such as gold or silver are not expected to create land use conflicts.

The Forest Service believes that conflicts generated between coal development and wildlife, range, and recreation management can be satisfactorily resolved at the coal tract profile or site-specific analysis and mining and reclamation (M&R) plan stages of coal activity planning.

The conflict between oil and gas exploration and development and coal resource development is one directly related to minerals management. The Forest Service is not responsible for minerals leasing, management, or disposal. If conflicts do

exist, these will have to be resolved between Department of the Interior officials and the mineral industry.

On the basis of the discussion above, it has been determined there are no multiple land use conflicts of such magnitude that would require any of the lands in the review are to be withdrawn from leasing considerations.

Step 4: Surface Owner Consultation

A total of 64 private surface owners were contacted by mail regarding their individual preferences to surface mining of their respective private surface. Thirty-five indicated a preference for surface mining, 12 were against surface mining, and 16 surface owners did not respond.

Table H-3 summarizes the results of the coal screening process in the TBNG.

TABLE H-3
SUMMARY OF RESULTS OF COAL SCREENING
IN THUNDER BASIN NATIONAL GRASSLAND

	Acres	Tons of Coal ^a (billions)
Acreage Available for Application of Unsuitability Criteria	206,340	11.62
Unsustainability Findings		
Criterion 2	1,761	.136
Criterion 3	422	.016
Acceptable Pending Further Study		
Criterion 19	7,625	.369
Acceptable with Special Stipulations		
Criterion 11	11,379	---
Unacceptable Because of Multiple Use Conflicts	0	---
Unavailable Because of Results of Surface Owner Consultation	0	0 ^b
Lands Under Existing Lease	31,986	2.3
Lands Under Preference Right Lease Application	7,275	.465
Acceptable for Leasing Consideration	164,796	8.34

a. Estimated total recoverable federal coal reserves.

b. Surface owners have the right to consent or refuse consent for surface mining of federal coal under their lands before leasing occurs. For this reason, further consideration for leasing was allowed for the lands involved with the 12 preferences against surface mining. Should the surface owners change their minds and give consent for mining, the lands involved would then be available for leasing. Should they refuse consent, the lands would be unavailable for leasing.

Special Stipulations

The following special stipulations will apply to federal coal lands that are acceptable for coal development and available for further leasing consideration in the TBNG. These stipulations are additional to the requirements defined in form 3109-3 (USDI BLM) and form 3109-3 (Forest Service R-2 Supplement D).

1. Prior to surface disturbance, a determination by the State of Wyoming, Department of Environmental Quality, and USDI, Office of Surface Mining, on the extent and nature of the potential alluvial valley floors (AVFs) must be made.
2. Prior to surface disturbance, a study must be conducted by the lessee to determine if golden eagle nest sites affected by the leases can be moved and/or if other types of mitigation are required.

3. The lessee, before the start of any mining operation, agrees to enter into such additional specific stipulations with the Forest Service covering the lessee's mining operations as are deemed necessary and appropriate, depending upon the mining methods to be used and current mining and restoration technology, to meet the following land management principles:
 - (a) Maintain and protect the areas which will be either directly or indirectly affected by the lessee's mining operations to minimize the effect on grazing capabilities.
 - (b) Install structures and facilities and revegetate disturbed areas to protect the soil from excessive erosion and return the land to a usable condition.
 - (c) take all measures reasonably necessary to minimize the pollution and contamination of the surface and subsurface water sources.
 - (d) Protect, insofar as is practicable, improvements owned or authorized by the Forest Service, and restore or replace these said improvements in event they must be destroyed or disturbed by the lessee's mining operations.
 - (e) Concurrent with filing of its mine and reclamation plan, the lessee shall submit for approval to the USDA Forest Service, a wildlife habitat recovery and replacement plan which addresses the protection and/or enhancement of mule deer, antelope, sage grouse, and other wildlife populations affected by habitat loss or displacement from existing habitat. Recovery or replacement of habitat may be accomplished either on site or off lease lands made available through the Forest Service.
4. The lessee shall prepare in triplicate and submit an annual operating plan to the Forest Supervisor which will include as a minimum:
 - (a) The mining operating areas and the methods of operation planned for each area.
 - (b) The areas to be treated and details of the rehabilitation and revegetation measures to be initiated in the planning year to meet the stipulated requirements of the Forest Service.
 - (c) The location and construction specifications of all roads necessary for the mining operation during the planning year.
 - (d) The steps to be taken to minimize water pollution and soil erosion.
 - (e) The correlation of the mining operations with the Forest Service's use and management of the lands not included in that year's operating plan.
5. The lessee shall submit to the Forest Service Supervisor an annual progress map and report of mining, restoration, and revegetation operations.
6. The lessee shall furnish performance bonds as required by the Forest Supervisor to guarantee fulfillment of the attached stipulations. Verification of bonds required by the State of Wyoming and pursuant to the State of Wyoming/Forest Service memorandum of understanding dated February 2, 1981, satisfies this requirement.
7. The Forest Service reserves the right to amend, alter, or otherwise change during the life of the lease, any and all stipulations necessary to meet the land management principles outlined in paragraphs 3 and 4 above, provided

that before any such amendments, alterations, or other changes are made, the lessee shall be invited to make any comments as he may deem necessary and, provided further, that no such amendments, alterations, and changes in these stipulations shall be made unless agreed to in writing by the lessee and the Forest Service.

8. The Forest Service reserves the right the manage and use all lands administered by it which are embraced within the lease for such purposes as they may deem desirable, provided that this use and management shall not interfere or conflict with the current mining operations of the lessee.

PREFERENCE RIGHT LEASE APPLICATIONS—PRRA

Procedure

The connotation of "preference right" is that any lease issued on PRLAs is noncompetitive; that is, if in the processing of PRLAs it is determined that the federal coal they contain can be economically developed in an environmentally sound manner, either wholly or in part, the areas will be leased to the holders of the preference right lease application.

These rights were established under the former prospecting permit system before the federal coal leasing moratorium went into effect. The Federal Coal Leasing Amendments Act of 1976 abolished noncompetitive (preference right) leasing, subject to valid existing permits and applications. Under the new federal coal management program, the BLM is now required to complete processing of all outstanding PRLAs. PRLAs in the Platte River Resource Area are illustrated on map 6.

Procedures for processing PRLAs are only partially related to the coal screening process; that is, only steps 2 and 3 (application of unsuitability criteria and evaluation of other multiple use conflicts) are applicable. Conducting these procedures for PRLAs may be completed as part of the land use planning process, or it could be conducted as a separate process.

As a matter of efficiency and timing, the BLM elected to conduct the coal unsuitability criteria application for the PRLAs during land use planning. Thus, the land use plan provides a basic resource analysis for use in later PRLA processing requirements. The findings of the unsuitability review do not constitute actual planning decisions at this time.

The potential impact of coal development and the values and concerns identified in the PRLA areas will be addressed later in the preparation of site-specific EAs and a regional PRLA/EIS, which will include evaluation of multiple use conflicts. This will result in the development of necessary stipulations and mitigating requirements to be used in the final adjudication of the applicant's right to a coal lease.

Final adjudication could result in rejection of the application, issuance of a coal lease, or exchange or purchase of the applicant's right in sensitive value areas that should not be mined.

Interrelationships with Other Developments in the Area

The PRLAs in northern Converse County are adjacent to and within the Thunder Basin National Grassland and the Powder River Coal Region to the north in Campbell County.

Intensive coal mining, new leasing, and processing of other PRLAs is occurring throughout this area. These "baseline" projects are listed in appendix F of the draft RMP/EIS.

Coal development in the Eastern Powder River Basin was addressed in an EIS prepared in 1982. An EIS that addresses proposed coal leasing in the Powder River Basin will be prepared and distributed in 1984.

Development of PRLAs in the Thunder Basin National Grassland was addressed by the Forest Service in two environmental assessments. The EAs are available for review at the Forest Service offices in Douglas and Laramie, Wyoming.

There are eleven PRLAs in northern Converse County (outside the TBNG) comprising about 21,000 acres and about 807 million tons of coal. The following is a summary of the findings and related recommendations from applying the coal unsuitability criteria to the PRLAs.

There were no findings for criteria 1, 3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 16, 18, and 20.

Southern Powder River PRLA Group

PRLAs W-21515 and W-21516, held by Dixie Natural Resources, Inc., encompass about 3,076 acres containing about 88 million tons of in-place reserves. The reserves contained in each PRLA amount to about 44 million tons. There were no unsuitability findings for these PRLAs.

Sand Draw PRLA Group

PRLAs W-13800, W-13801, W-14277, W-20057, and W-21119, held by Peabody Coal Co., encompass about 4,573 acres and contain about 52 million tons of in-place reserves. In these PRLAs criterion 2 applies where the Ross Road passes through the N½ of Section 25 and the SE¼ of Section 2, T. 38 N., R. 74 W. Exception (v) was applied.

Criterion 9 applies where a prairie dog town of 280 acres exists. It was found acceptable pending study. Its location is T. 37 N., R. 74 W., Sections 4, 5, 6, 8, and 19.

Criterion 11 applies in a golden eagle nest buffer. Eighty acres was found unsuitable in SE¼SW¼, Section 4, T. 37 N., R. 74 W., and NW¼NE¼, Section 9, T. 37 N., R. 74 W.

Criterion 15 applies in a sage grouse nesting and brooding habitat. A total of 1,200 acres was found unsuitable in Sections 7 and 18, T. 37 N., R. 74 W., and Sections 12 and 13, T. 37 N., R. 75 W.

Criterion 19 applies to a possible alluvial valley floor along the Dry Fork of the Cheyenne River. It is acceptable pending study.

Stevens South PRLA

PRLA W-14355, held by Western Fuels Association, Inc., encompasses about 4,352 acres and contains about 187 million tons of in-place reserves. No areas were found unsuitable in this PRLA.

Stevens North PRLA Group

PRLAs W-12767, W-14390, and W-14392, held by Western Fuels Association, Inc., encompasses about 8,863 acres and contains about 483 million tons of in-place reserves.

Appendix H

Criterion 9 applies on 750 acres of a prairie dog town in T. 37 N., R. 74 W., Sections 4, 5, 6, and 8. It is acceptable for mining pending study.

Criterion 11 applies on 500 acres of golden eagle nest buffers in Sections 29 and 30, T. 38 N., R. 74 W., and NE¼SW¼, Section 4, T. 37 N., R. 74 W. The buffers are unsuitable for mining.

Criterion 15 applies to a sage grouse lek of 400 acres in T. 37 N., R. 74 W., Sections 7 and 18. The lek is unsuitable for mining.

PREFERENCE RIGHT LEASE APPLICATIONS—TBNG

There are 6 PRLA groups in or partially in the TBNG. They encompass about 7,800 acres. These PRLAs contain an estimated 0.5 billion tons of federal coal. Table H-4 lists the PRLAs by name, preference right lease applicant, and acreage.

These PRLAs in the TBNG were evaluated by the Forest Service in a report titled "Forest Service Consent on Coal PRLAs, TBNG." The results of applying the unsuitability criteria and multiple use analysis are defined in that document.

These PRLAs will be included in a forthcoming EIS being prepared by the BLM for the Powder River Coal Region.

TABLE H-4
PREFERENCE RIGHT LEASE APPLICATIONS (PRLAs) WITHIN THE
THUNDER BASIN NATIONAL GRASSLAND

PRLA	Name	Company	Acreage
W-916 W-917	Dull Center	Peabody Coal	3,638
W-16876	East Black Thunder	ARCO (Anaconda)	80
W-25719 W-32067 W-60638	North Antelope	Peabody	880
W-25719 W-25718 W-32064 W-32065 W-32068	Rochelle Project	Peabody	2,324
W-32506	South Antelope	Peabody	835
	Sand Draw	see description for Converse County	

COAL LEASES IN THE PRRA

There are 14 existing coal leases in northern Converse County, including one in the TBNG, covering about 18,500 acres. Coal tonnage in these existing leases is given in the lease documents, which are available at the Casper District office. Coal leases are shown on map 6.

Table H-5 indicates the tonnage and acreage of federal coal lands in Converse County (outside the TBNG) in existing leases, PRLAs, and lands acceptable for future leasing consideration.

TABLE H-5
COAL IN CONVERSE COUNTY

	Thousands of Acres	Totals	Millions of Tons	Totals
Committed Federal Coal with High to Moderate Potential for Development				
PRLAs	20.8		807.0	
Existing federal coal leases	17.1		356.0	
Total committed coal in Converse County		37.9		1,163
Uncommitted Federal Coal in Converse County				
Federal surface	7.2		112.0	
State surface	0.4		10.0	
Private surface	41.2		712.0	
Total uncommitted	48.8		834.0	
Approximate amount of uncommitted coal available after the screening process is applied		30.6		555
Total available committed and uncommitted federal coal in Converse County (committed coal plus available uncommitted coal)		68.5		1,718

NOTE: Figures do not include coal in the Thunder Basin National Grassland.

REFERENCES

10

GLOSSARY SUPPLEMENT

The following definitions should be used in conjunction with the original Glossary in the draft RMP/EIS.

EPHEMERAL STREAM. A stream or reach of stream that flows briefly only in direct response to the precipitation in the immediate locality and whose channel is at all times above the water table. This stipulation is applied to intermittent streams and well-defined ephemeral streams where watershed conditions indicate that the potential exists for the stream to carry sufficient quantities of water to result in damage to dike channel. This decision is applied case by case and does not apply to every depression in topography or every conceivable drainage that might carry runoff at some time; rather, it applies to key drainage areas that have the potential to affect live streams.

PRODUCTIVE FORESTLAND. Land that produces at least 20 cubic feet basal area per acre per year.

NONPRODUCTIVE FORESTLAND. Land that does not produce at least 20 cubic feet basal area per acre per year.

WOODLAND. Forestland that grows tree species but does not produce a forest product such as posts, poles, or sawlogs. Most woodlands do produce fuelwood.

NATIONAL HISTORIC TRAIL. A historic route that has been designated by the Congress of the United States as having national importance. Under the National Trails System Act, as amended in 1978, the Secretary will initiate a program to develop the recreational potential of such a trail for the benefit of the public.

REFERENCE SUPPLEMENT

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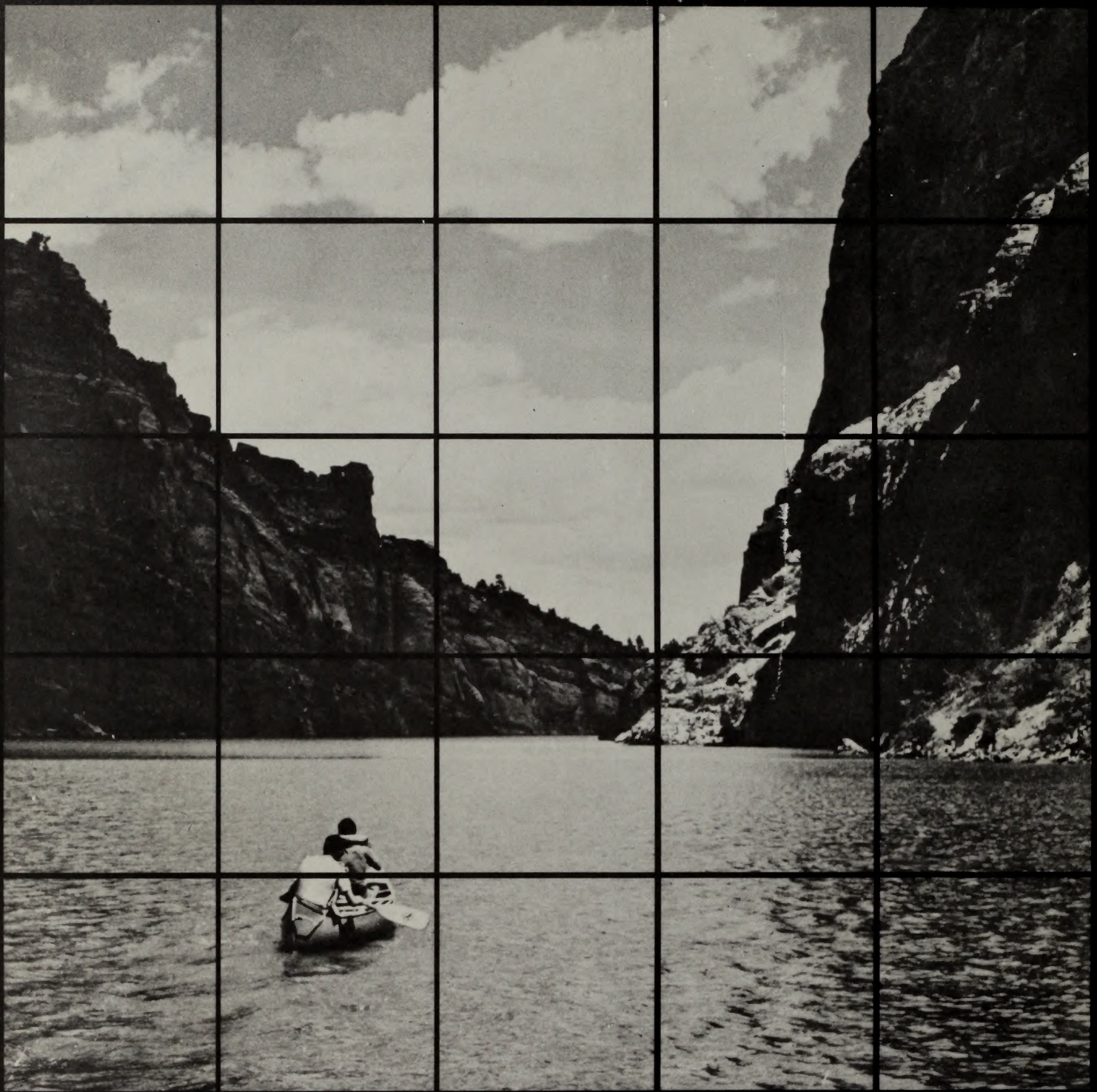
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